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Exam Code: 350-901

Exam Name: Developing Applications using Cisco Core Platforms and APIs (DEVCOR)

Certification Provider: Cisco

Corresponding Certifications: Cisco

Website: <https://VCEup.com/>



Exam A**QUESTION 1**

A developer has created an application based on customer requirements. The customer needs to run the application with the minimum downtime. Which design approach regarding high-availability applications, Recovery Time Objective, and Recovery Point Objective must be taken?

- A. Active/passive results in lower RTO and RPO. For RPO, data synchronization between the two data centers must be timely to allow seamless request flow.
- B. Active/passive results in lower RTO and RPO. For RPO, data synchronization between the two data centers does not need to be timely to allow seamless request flow.
- C. Active/active results in lower RTO and RPO. For RPO, data synchronization between the two data centers does not need to be timely to allow seamless request flow.
- D. Active/active results in lower RTO and RPO. For RPO, data synchronization between the two data centers must be timely to allow seamless request flow.

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

Section: Software Development and Design

QUESTION 2

A cloud native project is being worked on in which all source code and dependencies are written in Python, Ruby, and/or JavaScript. A change in code triggers a notification to the CI/CD tool to run the CI/CD pipeline. Which step should be omitted from the pipeline?

- A. Deploy the code to one or more environments, such as staging and/or production.
- B. Build one of more containers that package up code and all its dependencies.
- C. Compile code.
- D. Run automated tests to validate the correctness.

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

Section: Software Development and Design

QUESTION 3

Which two statements are considered best practices according to the 12-factor app methodology for application design? (Choose two.)

- A. Application code writes its event stream to stdout.
- B. Application log streams are archived in multiple replicated databases.
- C. Application log streams are sent to log indexing and analysis systems.
- D. Application code writes its event stream to specific log files.
- E. Log files are aggregated into a single file on individual nodes.

Correct Answer: AD

Section: (none)

Explanation

Explanation/Reference:

QUESTION 4

An organization manages a large cloud-deployed application that employs a microservices architecture. No notable issues occur with downtime because the services of this application are redundantly deployed over three or more data center regions. However, several times a week reports are received about application slowness. The container orchestration logs show faults in a variety of containers that cause them to fail and then spin up brand new. Which action must be taken to improve the resiliency design of the application while maintaining current scale?

- A. Update the base image of the containers.
- B. Test the execution of the application with another cloud services platform.
- C. Increase the number of containers running per service.
- D. Add consistent "try/catch(exception)" clauses to the code.



Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:
Section: Software Development and Design

QUESTION 5

How should a web application be designed to work on a platform where up to 1000 requests per second can be served?

- A. Use algorithms like random early detection to deny excessive requests.
- B. Set a per-user limit (for example, 5 requests/minute/user) and deny the requests from the users who have reached the limit.
- C. Only 1000 user connections are allowed; further connections are denied so that all connected users can be served.
- D. All requests are saved and processed one by one so that all users can be served eventually.

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:
Section: Software Development and Design

QUESTION 6

An organization manages a large cloud-deployed application that employs a microservices architecture across multiple data centers. Reports have received about application slowness. The container orchestration logs show that faults have been raised in a variety of containers that caused them to fail and then spin up brand new instances. Which two actions can improve the design of the application to identify the faults? (Choose two.)

- A. Automatically pull out the container that fails the most over a time period.
- B. Implement a tagging methodology that follows the application execution from service to service.
- C. Add logging on exception and provide immediate notification.
- D. Do a write to the datastore every time there is an application failure.
- E. Implement an SNMP logging system with alerts in case a network link is slow.



Correct Answer: BC
Section: (none)
Explanation

Explanation/Reference:
Section: Software Development and Design

QUESTION 7

Which two situations are flagged by software tools designed for dependency checking in continuous integration environments, such as OWASP? (Choose two.)

- A. publicly disclosed vulnerabilities related to the included dependencies
- B. mismatches in coding styles and conventions in the included dependencies
- C. incompatible licenses in the included dependencies
- D. test case failures introduced by bugs in the included dependencies
- E. buffer overflows to occur as the result of a combination of the included dependencies

Correct Answer: AE
Section: (none)
Explanation

Explanation/Reference:
Section: Software Development and Design

QUESTION 8

A network operations team is using the cloud to automate some of their managed customer and branch locations. They require that all of their tooling be ephemeral by design and that the entire automation environment can be recreated

without manual commands. Automation code and configuration state will be stored in git for change control and versioning. The engineering high-level plan is to use VMs in a cloud-provider environment then configure open source tooling onto these VMs to poll, test, and configure the remote devices, as well as deploy the tooling itself. Which configuration management and/or automation tooling is needed for this solution?

- A. Ansible
- B. Ansible and Terraform
- C. NSO
- D. Terraform
- E. Ansible and NSO

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

Section: Software Development and Design

QUESTION 9

An application is hosted on Google Kubernetes Engine. A new JavaScript module is created to work with the existing application. Which task is mandatory to make the code ready to deploy?

- A. Create a Dockerfile for the code base.
- B. Rewrite the code in Python.
- C. Build a wrapper for the code to "containerize" it.
- D. Rebase the code from the upstream git repo.

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:



QUESTION 10

Which database type should be used with highly structured data and provides support for ACID transactions?

- A. time series
- B. document
- C. graph
- D. relational

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

Section: Software Development and Design

QUESTION 11

Where should distributed load balancing occur in a horizontally scalable architecture?

- A. firewall-side/policy load balancing
- B. network-side/central load balancing
- C. service-side/remote load balancing
- D. client-side/local load balancing

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

Section: Software Development and Design

QUESTION 12

Which two statements about a stateless application are true? (Choose two.)

- A. Different requests can be processed by different servers.
- B. Requests are based only on information relayed with each request.
- C. Information about earlier requests must be kept and must be accessible.
- D. The same server must be used to process all requests that are linked to the same state.
- E. No state information can be shared across servers.

Correct Answer: AB

Section: (none)

Explanation

Explanation/Reference:

Section: Software Development and Design

QUESTION 13

Which statement about microservices architecture is true?

- A. Applications are written in a single unit.
- B. It is a complex application composed of multiple independent parts.
- C. It is often a challenge to scale individual parts.
- D. A single faulty service can bring the whole application down.

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

Section: Software Development and Design

QUESTION 14

Which two data encoding techniques are supported by gRPC? (Choose two.)

- A. XML
- B. JSON
- C. ASCII
- D. ProtoBuf
- E. YAML

Correct Answer: BE

Section: (none)

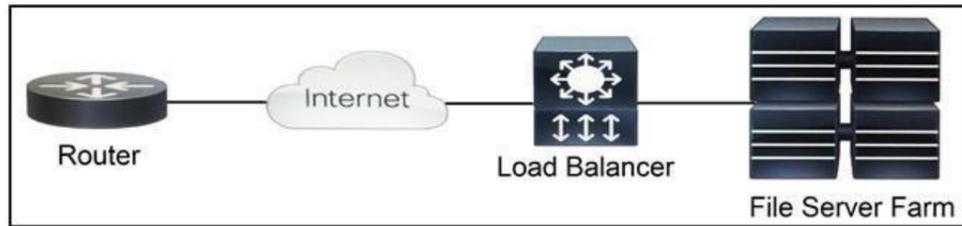
Explanation

Explanation/Reference:

Section: Software Development and Design

QUESTION 15

Refer to the exhibit. Which two functions are performed by the load balancer when it handles traffic originating from the Internet destined to an application hosted on the file server farm? (Choose two.)



- A. Terminate the TLS over the UDP connection from the router and originate an HTTPS connection to the selected server.
- B. Terminate the TLS over the UDP connection from the router and originate an HTTP connection to the selected server.
- C. Terminate the TLS over the TCP connection from the router and originate an HTTP connection to the selected server.
- D. Terminate the TLS over the TCP connection from the router and originate an HTTPS connection to the selected server.
- E. Terminate the TLS over the SCTP connection from the router and originate an HTTPS connection to the selected server.

Correct Answer: DE

Section: (none)

Explanation

Explanation/Reference:

Section: Software Development and Design

QUESTION 16

Which transport protocol is used by gNMI?

- A. HTTP/2
- B. HTTP 1.1
- C. SSH
- D. MQTT

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

Section: Software Development and Design

QUESTION 17

Which two methods are API security best practices? (Choose two.)

- A. Use tokens after the identity of a client has been established.
- B. Use the same operating system throughout the infrastructure.
- C. Use encryption and signatures to secure data.
- D. Use basic auth credentials over all internal API interactions.
- E. Use cloud hosting services to manage security configuration.

Correct Answer: AC

Section: (none)

Explanation

Explanation/Reference:

Section: Using APIs

QUESTION 18

A developer has completed the implementation of a REST API, but when it is executed, it returns a 401 error message. What must be done on the API to resolve the issue?

- A. Access permission to the resource must be granted, before the request.
- B. Configure new valid credentials.
- C. The requested API endpoint does not exist, and the request URL must be changed.

D. Additional permission must be granted before the request can submitted.

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:
 Section: Using APIs

QUESTION 19

Refer to the exhibit. Many faults have occurred in the ACI environment and a sample of them needs to be examined. Which API call retrieves faults 30 through 45?

Paginating the Results

By adding the `page-size` operator to the query URI you can divide the query results into groups (pages) of objects using the following syntax. The operand specifies the number of objects in each group.

`page-size = number-of-objects-per-page`

By adding the `page` operator in the query URI, you can specify a single group to be returned using the following syntax. The pages start from number 0.

`page = page-number`

This example shows you how to specify 15 fault instances per page in descending order, returning only the first page:

- A. GET `https://apic-ip-address/api/class/faultInfo.json?order-by=faultinst.severity|desc&page=1&page-size=15`
- B. GET `https://apic-ip-address/api/class/faultInfo.json?order-by=faultinst.severity|desc&page=2&page-size=15`
- C. GET `https://apic-ip-address/api/class/faultInfo.json?order-by=faultinst.severity|desc&page=30`
- D. GET `https://apic-ip-address/api/class/faultInfo.json?order-by=faultinst.severity|desc&page=2&page-size=30`

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:
 Section: Using APIs

QUESTION 20

Refer to the exhibit. The cURL POST request creates an OAuth access token for authentication with FDM API requests. What is the purpose of the file "@token_data" that cURL is handling?

```
curl --insecure -H "Accept: application/json" -H "Content-Type: application/json" -d @token_data https://ast0072-pod.cisco.com:33333//api/fdm/latest/fdm/token
```

- A. This file is a container to log possible error responses in the request.
- B. This file is given as input to store the access token received from FDM.
- C. This file is used to send authentication related headers.
- D. This file contains raw data that is needed for token authentication.

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:
 Section: Using APIs

QUESTION 21

User report that they can no longer process transactions with the online ordering application, and the logging dashboard is displaying these messages.

Fri Jan 10 19:37:31.123 EST 2020 [FRONTEND] INFO: Incoming request to add item to cart from user 45834534858

Fri Jan 10 19:37:31 247 EST 2020 [BACKEND] INFO: Attempting to add item to cart

Fri Jan 10 19:37:31 250 EST 2020 [BACKEND] ERROR: Failed to add item: MYSQLDB ERROR: Connection refused

What is causing the problem seen in these log messages?

- A. The database server container has crashed.
- B. The backend process is overwhelmed with too many transactions.
- C. The backend is not authorized to commit to the database.
- D. The user is not authorized to add the item to their cart.

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

Section: Using APIs

QUESTION 22

Refer to the exhibit. An Intersight API is being used to query RackUnit resources that have a tag keyword set to "Site". What is the expected output of this command?

`$filter { string }` query

Filter criteria for documents to return. A URI with a \$filter System Query Option identifies a subset of the Entries from the Collection of Entries identified by the Resource Path section of the URI. The subset is determined by selecting only the Entries that satisfy the predicate expression specified by the query option. The expression language that is used in \$filter operators supports references to properties and literals. The literal values can be strings enclosed in single quotes, numbers and boolean values (true or false) or any of the additional literal representations shown in the Abstract Type System section. Query examples: \$filter=Name eq 'Bob' \$filter=Tags/any(t: t/Key eq 'Site') \$filter=Tags/any(t: t/Key eq 'Site' and t/Value eq "London")

`GET /api/v1/compute/RackUnits?$filter=Tags/any (t:t/Key eq 'Site')`

- A. list of all resources that have a tag with the keyword "Site"
- B. error message because the Value field was not specified
- C. error message because the tag filter should be lowercase
- D. list of all sites that contain RackUnit tagged compute resources

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

Section: Using APIs

QUESTION 23

A user is receiving a 429 Too Many Requests error. Which scheme is the server employing that causes this error?

- A. rate limiting
- B. time outs
- C. caching
- D. redirection

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

Section: Using APIs

QUESTION 24

Refer to the exhibit. Which line of code must be added to this code snippet to allow an application to pull the next set of paginated items?

```

Meraki Dashboard API Response
-----
Response Status Code    : 200
Response Link Header    :
<https://n6.meraki.com/api/v0/organizations/681155/devices?perPage=3&startingAfter=
0000-0000-0000>; rel=first,
<https://n6.meraki.com/api/v0/organizations/681155/devices?perPage=3
&startingAfter=Q2EK-3UBE-RRUY>; rel=next,
<https://n6.meraki.com/api/v0/organizations/681155/devices?endingBefore=zzzz-zzzz-
zzzz&perPage=3>; rel=last
Response Body          : [
  {
    "name": "",
    "serial": "Q2CV-V49B-RCMZ",
    "mac": "0c:8d:db:95:aa:39",
    "networkId": "L_566327653141846927",
    "model": "MV71",
    "address": "430 E Cactus Ave.\nLas Vegas, NV 89183",
    "lat": 36.00017,
    "lng": -115.15302,
    "notes": "",
    "tags": "",
    "lanIp": "192.168.0.25",
    "configurationUpdatedAt": "2019-08-08T02:15:36Z",
    "firmware": "camera-3-30"
  },
  {
    "name": "Alex's MR84 - 1",
    "serial": "Q2EK-2LYB-PCZP",
    "mac": "e0:55:3d:10:56:8a",
    "networkId": "L_566327653141846927",
    "model": "MR84",
    "address": "",
    "lat": 39.9482993357826,
    "lng": -82.9895675461739,
    "notes": "",
    "tags": "",
    "lanIp": null,
    "configurationUpdatedAt": "2018-02-03T11:02:37Z",
    "firmware": "Not running configured version"
  },
  {
    "name": "Vegas Living Room MR84",
    "serial": "Q2EK-3UBE-RRUY",
    "mac": "e0:55:3d:10:5a:ca",
    "networkId": "L_566327653141846927",
    "model": "MR84",
    "address": "430 E Cactus Ave.\nLas Vegas, NV 89183",
    "lat": 36.00015,
    "lng": -115.15308,
    "notes": "",
    "tags": "",
    "lanIp": "192.168.0.20",
    "configurationUpdatedAt": "2018-09-29T12:23:21Z",
    "firmware": "Not running configured version"
  }
]
-----

```

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```

import request
import json

meraki_api_key = "<api key>"
url =
"https://api.meraki.com/api/v0/organizations/1234567890/devices"
headers = {
    "X-Cisco-Meraki-API-Key": meraki_api_key,
}
params = {
    "perPage": 3
}
res = requests.get(url, headers=headers, params=params)
formatted_message = """
Meraki Dashboard API Response
-----
Response Status Code : {}
Response Link Header : {}
Response Body        : {}
-----
""".format(res.status_code, res.headers.get('Link'),
json.dumps(res.json(), indent=4))
print(formatted_message)
<https://n6.meraki.com/api/v0/organizations/1234567890/devices?perPage=
3&startingAfter=0000-0000-0000>; rel=first,
<https://n6.meraki.com/api/v0/organizations/1234567890/devices?perPage=
3&startingAfter=Q2EK-3UBE-RRUY>; rel=next,
<https://n6.meraki.com/api/v0/organizations/1234567890/devices?
endingBefore=zzzz-zzzz-zzzz&perPage=3>; rel=last

```

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- A. requests.get(url, links=['next']['url'])
- B. requests.get(url, headers=links['next']['url'])
- C. requests.get(res.links['next']['url'], headers=headers)
- D. requests.get(res.headers.get('Link')['next']['url'], headers=headers)

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

Section: Using APIs

QUESTION 25

An Etag header is included in the HTTP response for an API resource. What are two benefits of using the value of the Etag for future interactions involving the same API resource? (Choose two.)

- A. caching and optimization of response payloads
- B. creating conditional requests
- C. categorizing and comparing this API resource with others
- D. checking the integrity of the resource
- E. requesting the list of operations authorized for this resource

Correct Answer: AB

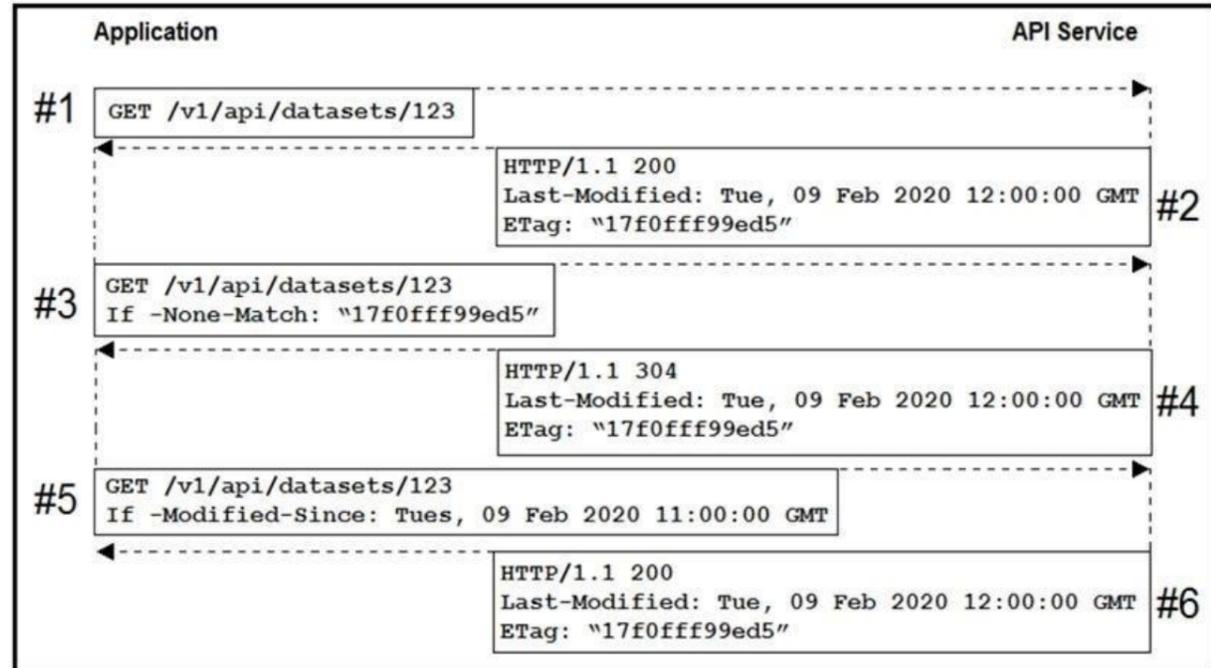
Section: (none)

Explanation**Explanation/Reference:**

Section: Using APIs

QUESTION 26

Refer to the exhibit. An application uses an API to periodically sync a large data set. Based on the HTTP message sequence provided, which statements are true about the caching behavior seen in the scenario? (Choose two.)



- A. The full dataset was transmitted to the client twice.
- B. The dataset changed sometime between message #4 and #5.
- C. A partial dataset was transmitted to the client in message #4.
- D. The dataset did not change during the scenario.
- E. Messages #3 and #5 are equivalent.

Correct Answer: AD**Section:** (none)**Explanation****Explanation/Reference:**

Section: Using APIs

QUESTION 27

Which RFC5988 (Web Linking) relation type is used in the Link header to control pagination in APIs?

- A. rel="index"
- B. rel="page"
- C. rel="next"
- D. rel="section"

Correct Answer: C**Section:** (none)**Explanation****Explanation/Reference:**

Section: Using APIs

QUESTION 28

A client is written that uses a REST API to interact with a server. Using HTTPS as the transport, an HTTP request is sent and received an HTTP response. The response contains the HTTP response status code: 503 Service Unavailable. Which action is the appropriate response?

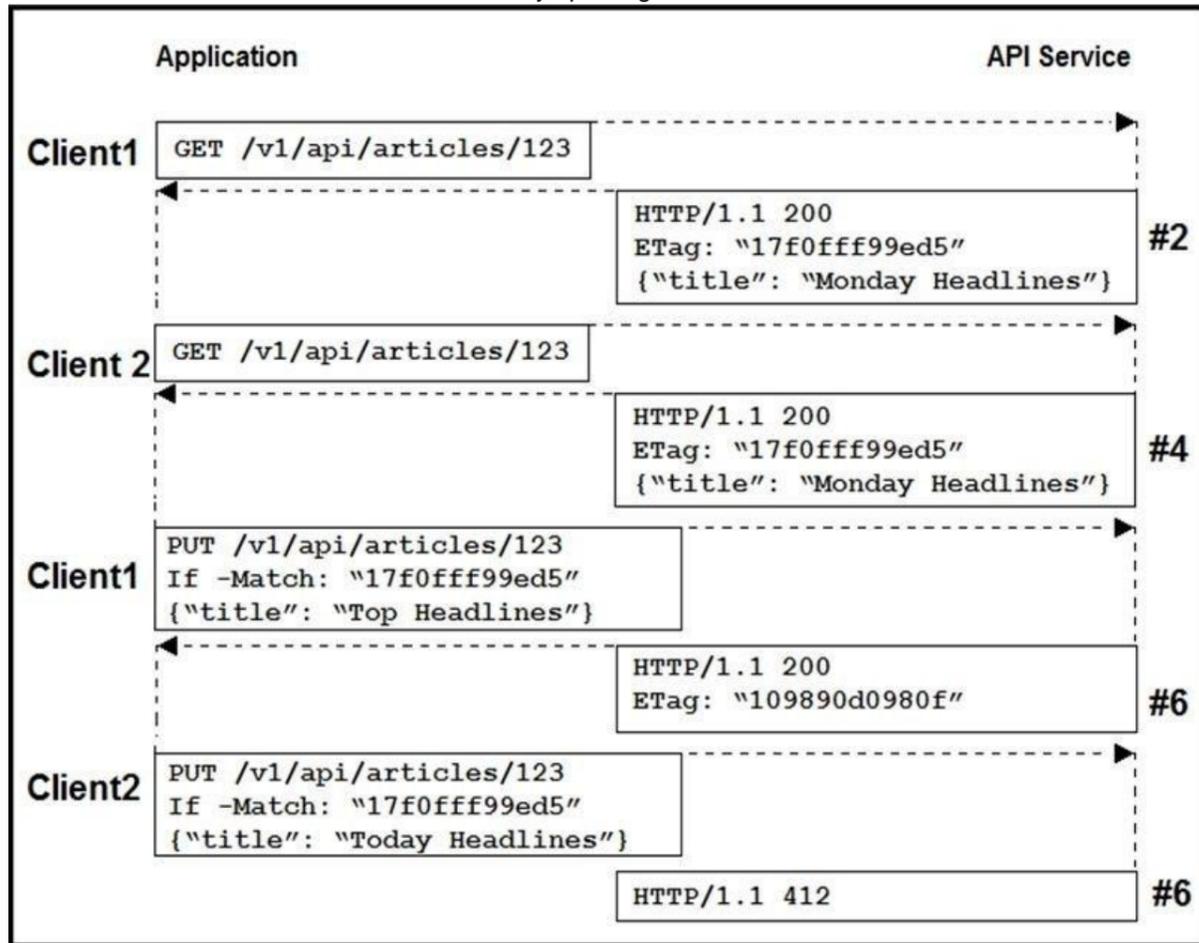
- A. Add an Authorization header that supplies appropriate credentials and sends the updated request.
- B. Resend the request using HTTP as the transport instead of HTTPS.
- C. Add an Accept header that indicates the content types that the client understands and send the updated request.
- D. Look for a Retry-After header in the response and resend the request after the amount of time indicated.

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
 Section: Using APIs

QUESTION 29

Refer to the exhibit. Two editors are concurrently updating an article's headline from their mobile devices. What results from this scenario based on this REST API sequence?



- A. The article is marked as "Conflicted"
- B. The article headline is "Monday Headlines"
- C. The article headline is "Today Headlines"
- D. The article headline is "Top Headlines"

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:

Section: Using APIs

QUESTION 30

Refer to the exhibit. This snippet of a script has recently started exiting abnormally with an exception stating "Unexpected HTTP Response code: 429". Which solution handles rate limiting by the remote API?

```
response = requests.get(url)
if response.status_code != 200:
    error_message = "Unexpected HTTP Response code: {}".format(response.status_code)
    raise Exception(error_message)
data = response.json()
```

A.

```
response = requests.get(url)
if response.status_code == 429:
    backoff_seconds = int(response.headers['Retry-After'])
    sleep(backoff_seconds)
elif response.status_code != 200:
    error_message = "Unexpected HTTP Response code: {}".format(response.status_code)
    raise Exception(error_message)
data = response.json()
```

B.

```
response = requests.get(url)
if response.status_code != 200 and response.status_code != 429:
    error_message = "Unexpected HTTP Response code: {}".format(response.status_code)
    raise Exception(error_message)
data = response.json()
```

C.

```
response = requests.get(url)
if response.status_code != 200 and response.status_code != 429:
    backoff_seconds = int(response.headers['Retry-After'])
    sleep(backoff_seconds)
    error_message = "Unexpected HTTP Response code: {}".format(response.status_code)
    raise Exception(error_message)
data = response.json()
```

D.

```
response = requests.get(url)
if response.status_code == 429:
    backoff_seconds = int(response.headers['Retry-After'])
    sleep(backoff_seconds)
    response = requests.get(url)
elif response.status_code != 200:
    error_message = "Unexpected HTTP Response code: {}".format(response.status_code)
    raise Exception(error_message)
data = response.json()
```

Correct Answer: D**Section:** (none)**Explanation****Explanation/Reference:**

Section: Using APIs

QUESTION 31

An application uses OAuth to get access to several API resources on behalf of an end user. What are two valid parameters to send to the authorization server as part of the first step of an authorization code grant flow? (Choose two.)

- A. URI to which the authorization server will send the user-agent back when access is granted or denied
- B. list of the API resources that the application is requesting to access
- C. secret that was generated by the authorization server when the application registered as an OAuth integration
- D. list of scopes that correspond to the API resources to which the application is requesting to access
- E. name of the application under which the application registered as an OAuth integration

Correct Answer: AC

Section: (none)

Explanation

Explanation/Reference:

Section: Using APIs

QUESTION 32

Refer to the exhibit. Which set of API requests must be executed by a Webex Teams bot after receiving a webhook callback to process messages in a room and reply with a new message back to the same room?

Responding to Events

After creating a bot, you can use its access token with the Webex REST APIs to perform actions as the bot, such as [sending a message](#) with an interactive [card](#) to someone. To respond to events within Webex Teams, such as someone sending your bot a message or adding it to a group space, you'll need to configure webhooks. Webhooks will let you know when an activity has occurred so you can take action. Check out the [Webhooks Guide](#) for more information about configuring webhooks.

With cards, you can give your users even more ways to interact with your bot or service, right in the Webex Teams clients. See the [Cards Guide](#) for more information.

Differences Between Bots and People

One key difference between Webex Teams Bots and regular users is that, in group rooms, bots **only have access to messages in which they are mentioned**. This means that `messages:created` webhooks only fire when the bot is mentioned in a room.

Also, [listing messages](#) requires that you specify a special `?mentionedPeople=me` query parameter.

```
GET /messages?mentionedPeople=me&roomId=SOME_INTERESTING_ROOM
Authorization: Bearer THE_BOTS_ACCESS_TOKEN
```

Bot Frameworks & Tools

There are several bot frameworks that can greatly simplify the bot development process by abstracting away the low-level communications with the Webex REST API, such as creating and sending API requests and configuring webhooks. Instead, you can focus on the building the interaction and business logic of your bot.

[Flint](#) is an open source bot framework with support for regex pattern matching for messages and more.

- A.

```
GET /messages?mentionedPeople=me&roomId=<ROOM_ID>
POST /messages
{
  "roomId": "<ROOM_ID">,
  "text": "<MESSAGE>"
}
```
- B.

```
GET /messages&roomId=<ROOM_ID>
PUT /messages
{
  "roomId": "<ROOM_ID">,
  "text": "<MESSAGE>"
}
```
- C.

```
GET /messages?mentionedPeople=me&roomId=<ROOM_ID>
PUT /messages
{
  "roomId": "<ROOM_ID">,
  "text": "<MESSAGE>"
}
```
- D.

```
GET /messages&roomId=<ROOM_ID>
POST /messages
{
  "roomId": "<ROOM_ID">,
  "text": "<MESSAGE>"
}
```

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Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:
 Section: Cisco Platforms

QUESTION 33

Which snippet presents the correct API call to configure, secure, and enable an SSID using the Meraki API?

- A.

```
curl -X PUT \
  -url 'https://api.meraki.com/api/v0/networks/:networkId/ssids/2' \
  -H 'X-Cisco-Meraki-API-Key: 15da0c6ffff295f16267f88f98694cf29a86ed87' \
  -H 'Accept: application/json' \
  -H 'Content-type: application/json' \
  -data-raw '{
    "name": "My SSID",
    "enabled": false,
    "authMode": "psk",
    "encryptionMode": "wpa",
    "psk": "meraki123",
    "wpaEncryptionMode": "WPA1 and WPA2"
  }'
```

- B. `curl -X PUT \`
`--url 'https://api.meraki.com/api/v0/networks/:networkId/ssids/2' \`
`-H 'X-Cisco-Meraki-API-Key: 15da0c6ffff295f16267f88f98694cf29a86ed87' \`
`-H 'Accept: application/json' \`
`-H 'Content-type: application/json' \`
`--data-raw '{`
 `"name": "My SSID",`
 `"enabled": true,`
 `"authMode": "psk",`
 `"encryptionMode": "wpa",`
 `"psk": "meraki123",`
 `"wpaEncryptionMode": "WPA1 and WPA2"`
`}`
- C. `curl -X PUT \`
`--url 'https://api.meraki.com/api/v0/networks/:networkId/ssids/2' \`
`-H 'X-Cisco-Meraki-API-Key:`
`15da0c6ffff295f16267f88f98694cf29a86ed87' \`
`-H 'Accept: application/json' \`
`-H 'Content-type: application/json' \`
`--data-raw '{`
 `"enabled": true,`
 `"useVlanTagging": true`
`}`
- D. `curl -X PUT \`
`--url 'https://api.meraki.com/api/v0/networks/:networkId/ssids/2' \`
`-H 'X-Cisco-Meraki-API-Key: 15da0c6ffff295f16267f88f98694cf29a86ed87' \`
`-H 'Accept: application/json' \`
`-H 'Content-type: application/json' \`
`--data-raw '{`
 `"name": "My SSID",`
 `"enabled": true,`
`}`

VCEUp

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:
 Section: Cisco Platforms

QUESTION 34

FILL BLANK

Fill in the blanks to complete the Python script to enable the SSID with a name of "371767916" in the network resource "11111111" using the Meraki Dashboard API.

```
import requests
url = "https://api.meraki.com/api/v0/11111111/ssids/"
payload = "{\r\n  \"name\": \"\" \r\n  \"enabled\": true\r\n}"
headers = {
  'Accept': '*/*',
  'Content-Type': 'application/json'
}
response = requests.request(, url, headers=headers, data = )
print(response.text.encode('utf8'))
```

A. See explanation below

Correct Answer: A
Section: (none)

Explanation**Explanation/Reference:**

Section: Cisco Platforms

1. 371767916
2. "{{HTTP_METHOD}}"
3. payload

QUESTION 35

The UCS Python SDK includes modules for Service Profile template creation. Which two UCS Service Profile template types are supported? (Choose two.)

- A. initial-template
- B. updating-template
- C. abstract-template
- D. attached-template
- E. base-template

Correct Answer: AB

Section: (none)

Explanation**Explanation/Reference:**

Section: Cisco Platforms

QUESTION 36

A container running a Python script is failing when it reaches the integration testing phase of the CI/CD process. The code has been reviewed thoroughly and the build process works on this container and all other containers pass unit and integration testing.

What should be verified to resolve the issue?

- A. that the correct port is exposed in the Dockerfile
- B. that the necessary modules and packages are installed on build
- C. that the script is running from the right directory
- D. that the Python version of the container image is correct

Correct Answer: B

Section: (none)

Explanation**Explanation/Reference:**

Section: Cisco Platforms

QUESTION 37

Click on the GET Resource button above to view resources that will help with this question.

"Greater Than" Operator

The **gt** operator returns true if the left operand is greater than the right operand, otherwise it returns false. The **gt** operator accepts numeric, dates and string values.

Example: Query RackUnit resources where AvailableMemory is greater than 98304MB:

```
GET /api/v1/compute/RackUnits?$filter=AvailableMemory gt 98304
```

Example: Query Audit log records where 'CreationTime' is greater than '2018-06-20T05:31:38.862Z'. The date must be specified in UTC time without quotes.

```
GET /api/v1/aaa/AuditRecords?$filter=CreateTime gt 2018-06-20T05:31:38.862Z
```

"Less Than" Operator

The **lt** operator returns true if the left operand is less than the right operand, otherwise it returns false. The **lt** operator accepts numeric, dates and string values.

Example: Query RackUnit resources where AvailableMemory is less than 98304MB:

```
GET /api/v1/compute/RackUnits?$filter=AvailableMemory lt 98304
```

"Greater Than Or Equal" Operator

The **ge** operator returns true if the left operand is greater than or equal to the right operand, otherwise it returns false. The **ge** operator accepts numeric, dates and string values.

Example: Query RackUnit resources where AvailableMemory is greater than or equal to 98304MB:

```
GET /api/v1/compute/RackUnits?$filter=AvailableMemory ge 98304
```

"Less Than Or Equal" Operator

The **le** operator returns true if the left operand is less than or equal to the right operand, otherwise it returns false. The **le** operator accepts numeric, dates and string values.

Example: Query RackUnit resources where AvailableMemory is less than or equal to 98304MB:

```
GET /api/v1/compute/RackUnits?$filter=AvailableMemory le 98304
```

"And" Operator

The **and** operator returns true if both the left and right operands evaluate to true, otherwise it returns false.

Example: Query RackUnit resources where the Model property is equal to 'UCSC-C240-M5SN' and thy server has more than 64GB of memory:

```
GET /api/v1/compute/RackUnits?$filter=Model eq 'UCSC-C240-M5SN' and AvailableMemory gt 65000
```

"Or" Operator

The **or** operator returns true if either the left or right operand evaluate to true, otherwise it returns false.

Example: Query RackUnit resources where the Model property is equal to 'UCSC-C240-M5SN' **or** the Model property is equal to 'UCSC-C240-M5SN'. Use the \$select keyword to reduce the size of the output JSON document.

"Not" Operator

The **not** operator returns true if the operand returns false, otherwise it returns false.

Example: Query RackUnit resources where the model property is not ('HX220C-M5SX' or 'HX220C-M5S'). The example shows how grouping parenthesis can be used to set the operator precedence.

```
GET /api/v1/compute/RackUnits?$select=Vendor,Model,Serial&top=10&$filter=not (Model eq 'HX220C-M5SX' or Model eq 'HX220C-M5S')
```

"In" Operator

The **in** operator returns true if the left operand is equal to one of the values specified in the right operand, otherwise it returns false. The **in** operator accepts numeric and string values.

Values must be specified as a comma-separated list enclosed in parenthesis.

Example: Query RackUnit resources where the Model is either 'HX220C-M5SX' or 'UCSC-C240-M5SN'.

```
GET /api/v1/compute/RackUnits?$filter=Model in ('HX220C-M5SX', 'UCSC-C240-M5SN')
```

String Functions**"contains" Function**

The **contains** function has the following signature:

```
boolean contains(s string, subst string)
```

The **contains** function returns true if the second parameter string value is a substring of the first parameter string value, otherwise it returns false.

Example: Query RackUnit resources where the value of the 'Model' property contains 'C240'

```
GET /api/v1/RackUnits?$filter=contains(Model, 'C240')
```

"startsWith" Function

The **startswith** function has the following signature:

```
boolean startswith(s string, subst string)
```

The **startswith** function returns true if the first parameter string value starts with the second parameter string value, otherwise it returns false.

Example: Query RackUnit resources where the value of the 'Model' property starts with the prefix 'UCSC-C240'

```
GET /api/v1/RackUnits?$filter=startswith(Model, 'UCSC-C240')
```

"endswith" Function

The **endswith** function has the following signature:

```
boolean endswith(string, suffix string)
```

The **endswith** function returns true if the first parameter string value ends with the second parameter string value, otherwise it returns false.

Example: Query RackUnit resources where the value of the 'Model' property ends with the suffix 'M5'

```
GET /api/v1/RackUnits?$filter=endswith(Model, 'M5')
```

"tolower" Function

The **tolower** function has the following signature:

```
string tolower(string)
```

VCEUp

An engineer is managing a DC with 6000 Cisco UCS servers installed and running. The engineer has been asked to identify all resources where the model is in the UCSB family and the available memory is less than or equal to 5 GB. Which REST API call accomplishes this task?

- A. GET/api/v1/compute/RackUnits?\$select=Vendor,Model,Serial&\$filter=not(Model eq 'UCSC') and AvailableMemory le 5000
- B. GET/api/v1/compute/RackUnits?\$select=Vendor,Model,Serial&\$filter=Model eq 'UCSB' and AvailableMemory lt 5000
- C. GET/api/v1/compute/RackUnits?\$select=Vendor,Model,Serial&\$filter=contains(Model, UCSB') and AvailableMemory lt 5000
- D. GET/api/v1/compute/RackUnits?\$select=Vendor,Model,Serial&\$filter=contains(Model, UCSB') and AvailableMemory le 5000

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

Section: Cisco Platforms

QUESTION 38

AppGigabitEthernet interface is used as data port for a container on a Cisco Catalyst 9000 Series Switch. Which two interface configuration options should be used? (Choose two.)

- A. trunk interface
- B. bridged virtual interface
- C. SPAN port
- D. management interface
- E. subinterface

Correct Answer: AC

Section: (none)

Explanation

Explanation/Reference:

Section: Cisco Platforms

QUESTION 39

Which two types of storage are supported for app hosting on a Cisco Catalyst 9000 Series Switch? (Choose two.)

- A. external USB storage
- B. internal SSD
- C. CD-ROM
- D. SD-card
- E. bootflash

Correct Answer: AB

Section: (none)

Explanation

Explanation/Reference:

Section: Cisco Platforms

QUESTION 40

Refer to the exhibit. Which configuration of method and parameter retrieves the health of a laptop connected to the network from Cisco DNA Center?

```
import http.client

conn = http.client.HTTPSConnection("dnac.cisco.com")

headers = {
    '_runsync': "true",
    '_timeout': "30",
    '_persistbapioutput': "true",
}

conn.request(" ", "/dna/intent/api/v1/ ?timestamp=10000", headers=headers)

res = conn.getresponse()
data = res.read()

print(data.decode("utf-8"))
```

- A. PUT; network-health;
- B. GET; client-health;
- C. GET; network-device;
- D. POST; network-device;

Correct Answer: C

Section: (none)

Explanation**Explanation/Reference:**

Section: Cisco Platforms

QUESTION 41

On a Cisco Catalyst 9300 Series Switch, the guest shell is being used to create a service within a container. Which change is needed to allow the service to have external access?

- A. Apply ip nat overload on VirtualPortGroup0.
- B. Apply ip nat inside on Interface VirtualPortGroup0.
- C. Apply ip nat outside on Interface VirtualPortGroup0.
- D. Apply ip nat inside on Interface GigabitEthernet1.

Correct Answer: B**Section: (none)****Explanation****Explanation/Reference:**

Section: Cisco Platforms

QUESTION 42

Refer to the exhibit. Which code snippet is required in the headers to successfully authorize wireless information from Cisco DNA Center?

```
headers = ( _____ )
try:
    response = requests.get("https://sandboxnac.cisco.com/dna/intent/api/v1/wireless/profile",
        headers=headers, verify=False)
except requests.exceptions.RequestException as cerror:
    print("Error processing request", cerror)
    sys.exit(1)
```

- A. headers = {'X-auth-token':'fa8426a0-8eaf-4d22-8e13-7c1b16a9370c'}
- B. headers = {'Authorization':'Basic YWRtaW46R3JhcGV2aW5IMQ==}'}
- C. headers = {'Authorization':'Bearer ASDNFALKJER23412RKDALSNKF}'}
- D. headers = {'Content-type':'application/json}'}

Correct Answer: A**Section: (none)****Explanation****Explanation/Reference:**

Section: Cisco Platforms

QUESTION 43

Into which two areas are AppDynamics APIs categorized? (Choose two.)

- A. application-centric
- B. analytics-events
- C. database-visibility
- D. platform-side
- E. agent-side

Correct Answer: DE**Section: (none)****Explanation****Explanation/Reference:**

Section: Cisco Platforms

QUESTION 44

Refer to the exhibit. This script uses ciscoyang to configure two VRF instances on a Cisco IOS-XR device using the Yang NETCONF type. Which two words are required to complete the script? (Choose two.)

```
node `default` {
  cisco_yang_netconf { `my-config` :
    target => '<vrf xmlns='http://cisco.com/ns/yang/Cisco-IOS-XR-infra-rsi-cfg"/>',
    source => '<vrf xmlns='http://cisco.com/ns/yang/Cisco-IOS-XR-infra-rsi-cfg">
      <vrf>
        <vrf-name>VOIP</vrf-name>
        <create/>
        <description>Voice over IP</description>
        <vpn-id>
          <vpn-oui>875</vpn-oui>
          <vpn-index>3</vpn-index>
        </vpn-id>
      </vrf>
      <vrf>
        <vrf-name>INTERNET</vrf-name>
        <create/>
        <description>Generic external traffic</description>
        <vpn-id>
          <vpn-oui>875</vpn-oui>
          <vpn-index>22</vpn-index>
        </vpn-id>
      </vrf>
    </vrf>
  }
  mode => ,
  force => ,
}
--
```

VCEUp

- A. ensure
- B. commit
- C. false
- D. replace
- E. none

Correct Answer: CD

Section: (none)

Explanation

Explanation/Reference:

Section: Cisco Platforms

QUESTION 45

Refer to the exhibits above and click on the IETF Routing tab in the top left corner to help with this question. A developer is trying to update the routing instance by adding a new route to the routes list using the URL in the exhibit. What action must be taken to fix the error being received?

```
(
  "errors": {
    "error": [
      {
        "error-message": "object is not writable: /rt:routing=
state/rt:routing-instance",
        "error-path": "/ietf-routing:routing-state/routing-instance=default",
        "error-tag": "malformed-message",
        "error-type": "application"
      }
    ]
  }
)
```

```
https://ios-xe-ngmt-latest.cisco.com:9443/restconf/data/ietf-routing:routing-
state/routing-instance-default
```

- A. Fix the body being sent to update the routes list
- B. Change the HTTP Method being used to make the change
- C. Change the url to "/ietf-routing:routing/routing-instance=default"
- D. Update the authorization credentials
- E. Change the URL to "/ietf-routing:routing-instance/default"

Correct Answer: A

Section: (none)

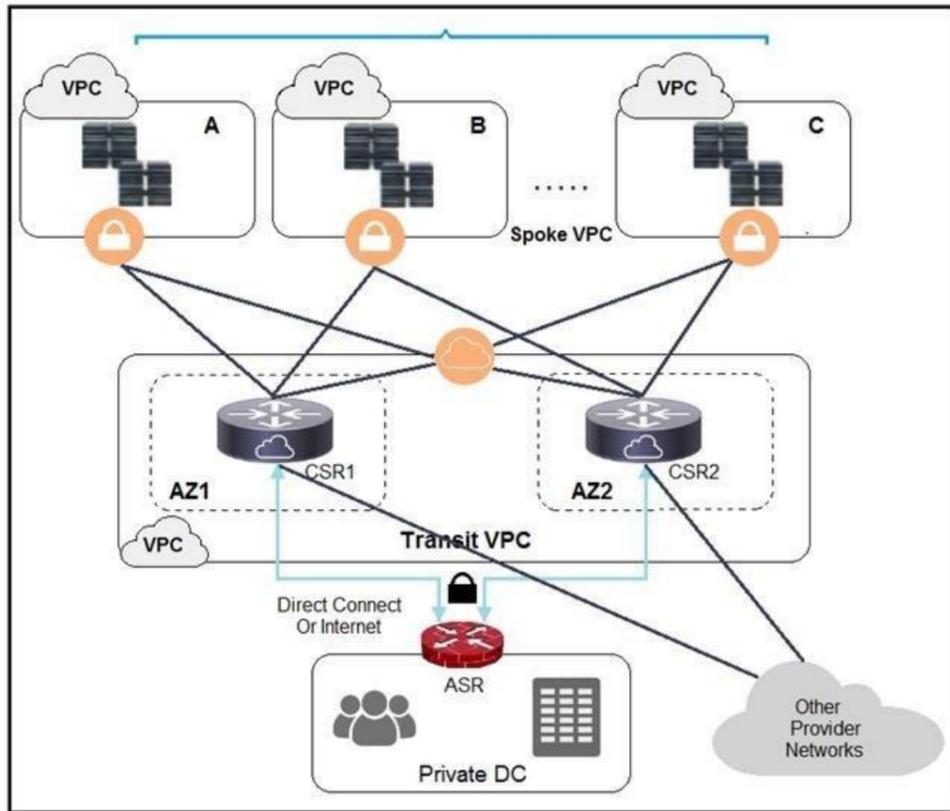
Explanation

Explanation/Reference:

Section: Cisco Platforms

QUESTION 46

Refer to the exhibit. A company has extended networking from the data center to the cloud through Transit VPC. Which two statements describe the benefits of this approach? (Choose two.)



- A. Dynamic routing combined with multi-AZ- deployment creates a robust network infrastructure.
- B. VPC virtual gateways provide highly available connections to virtual networks.
- C. Dedicated VPC simplifies load balancing by combining internal and external web services.
- D. VPC virtual gateways provide more secure connections to virtual networks.
- E. Dedicated VPC simplifies routing by not combining this service with other shared services.

Correct Answer: BD

Section: (none)

Explanation

Explanation/Reference:

Section: Application Deployment and Security

QUESTION 47

A developer has just completed the configuration of an API that connects sensitive internal systems. Based on company policies, the security of the data is a high priority. Which approach must be taken to secure API keys and passwords?

- A. Embed them directly in the code.
- B. Store them in a hidden file.
- C. Store them inside the source tree of the application.
- D. Change them periodically.

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

Section: Application Deployment and Security

QUESTION 48

Which two principles are included in the codebase tenet of the 12-factor app methodology? (Choose two.)

- A. An application is always tracked in a version control system.
- B. There are multiple codebases per application.
- C. The codebase is the same across all deploys.
- D. There can be a many-to-one correlation between codebase and application.
- E. It is only possible to have one application deployment per codebase.

Correct Answer: AE

Section: (none)

Explanation

Explanation/Reference:

Section: Application Deployment and Security

QUESTION 49

What is submitted when an SSL certificate is requested?

- A. PEM
- B. CRT
- C. DER
- D. CSR

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

Section: Application Deployment and Security

QUESTION 50

Which two actions must be taken when an observable microservice application is developed? (Choose two.)

- A. Know the state of a single instance of a single service.
- B. Place "try/except" statement in code.
- C. Place log statements in the code.
- D. Use distributed tracing techniques.
- E. Deploy microservice to multiple datacenters.

Correct Answer: BC

Section: (none)

Explanation

Explanation/Reference:

Section: Application Deployment and Security

QUESTION 51

Which two countermeasures help reduce the risk of playback attacks? (Choose two.)

- A. Store data in a NoSQL database.
- B. Implement message authentication (HMAC).
- C. Enable end-to-end encryption.
- D. Remove stack traces from errors.
- E. Use short-lived access tokens.

Correct Answer: BE

Section: (none)

Explanation

Explanation/Reference:

Section: Application Deployment and Security

QUESTION 52

Which type of file is created from issued intermediate, root, and primary certificates for SSL installation on a server?

- A. DER
- B. CSR
- C. PEM
- D. CRT

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

Section: Application Deployment and Security

QUESTION 53

Which two statements describe advantages of static code analysis over unit tests? (Choose two.)

- A. It checks for potential tainted data where input is not checked.
- B. It enforces proper coding standards and style.
- C. It performs a quick analysis of whether tests will pass or fail when run.
- D. It checks for race conditions in threaded applications.
- E. It estimates the performance of the code when run.

Correct Answer: BC

Section: (none)

Explanation

Explanation/Reference:

Section: Application Deployment and Security

QUESTION 54

Refer to the exhibit. Which additional line results in the output of Test 1 upon execution of the docker run --rm devnet 1 command in a Dockerfile with this content?

```
FROM alpine:3.7
RUN apk add --no-cache bash
```

- A. CMD ["/bin/echo", "Test"]
- B. RUN ["/bin/echo", "Test"]
- C. ENTRYPOINT ["/bin/echo", "Test"]
- D. CMD ["/bin/echo Test"]

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

Section: Application Deployment and Security

QUESTION 55

Which two techniques protect against injection attacks? (Choose two.)

- A. input validation

- B. trim whitespace
- C. limit text areas to 255 characters
- D. string escaping of user free text and data entry
- E. only use dropdown, checkbox, and radio button fields

Correct Answer: AE

Section: (none)

Explanation

Explanation/Reference:

Section: Application Deployment and Security

QUESTION 56

Refer to the exhibit. A kubeconfig file to manage access to clusters is provided. How many clusters are defined and which of them are accessed using username/password authentication versus certificate?

```
apiVersion: v1
clusters:
- cluster:
  certificate-authority: fake-ca-file
  server: https://1.2.3.4
  name: development
- cluster:
  insecure-skip-tls-verify: true
  server: https://5.6.7.8
  name: scratch
contexts:
- context:
  cluster: development
  namespace: frontend
  user: developer
  name: dev-frontend
- context:
  cluster: development
  namespace: storage
  user: developer
  name: dev-storage
- context:
  cluster: scratch
  namespace: default
  user: experimenter
  name: exp-scratch
current context: ""
kind: Config
preferences: {}
users:
- name: developer
  user:
    client-certificate: fake-cert-file
    client-key: fake-key-file
- name: experimenter
  user:
    password: some-password
    username: exp
```

VCEUp

- A. two clusters; scratch
- B. three clusters; scratch
- C. three clusters; development
- D. two clusters; development

Correct Answer: C

Section: (none)

Explanation**Explanation/Reference:**

Section: Application Deployment and Security

QUESTION 57

Which two strategies are used to protect personally identifiable information? (Choose two.)

- A. Encrypt data in transit.
- B. Encrypt hash values of data.
- C. Encrypt data at rest.
- D. Only hash usernames and passwords for efficient lookup.
- E. Only encrypt usernames and passwords for efficient lookup.

Correct Answer: AB

Section: (none)

Explanation**Explanation/Reference:**

Section: Application Deployment and Security

QUESTION 58

The response from a server includes the header ETag: W/"7eb8b94419e371767916ef13e0d6e63d". Which statement is true?

- A. The ETag has a Strong validator directive.
- B. The ETag has a Weak validator directive, which is an optional directive.
- C. The ETag has a Weak validator directive, which is a mandatory directive.
- D. The ETag has a Strong validator directive, which it is incorrectly formatted.

Correct Answer: B

Section: (none)

Explanation**Explanation/Reference:**

Section: Application Deployment and Security

QUESTION 59

Refer to the exhibit. a developer created the code, but it fails to execute. Which code snippet helps to identify the issue?

```
open_file = open("text_file.txt", "r")
read_file = open_file.read()
print(read_file)
```

- A.

```
try:
    open_file = open("text_file.txt", "r")
    read_file = open_file.read()
    print(read_file)
except:
    print("File not there")
```
- B.

```
try:
    print("File not there")
except:
    open_file = open("text_file.txt", "r")
    read_file = open_file.read()
    print(read_file)
```

- C.

```
try:
    open_file = open("text_file.txt", "r")
    read_file = open_file.read()
    print(read_file)
except:
    print("File not there")
catch:
    error(read_file)
```
- D.

```
open_file = open("text_file.txt", "r")
read_file = open_file.read()
try:
    print(read_file)
except:
    print("File not there")
```

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

Section: Application Deployment and Security

QUESTION 60

Which HTTP status code indicates that a client application is experiencing intentional rate limiting by the server?

- A. 202
- B. 401
- C. 429
- D. 503

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

Section: Application Deployment and Security

QUESTION 61

There is a requirement to securely store unique usernames and passwords. Given a valid username, it is also required to validate that the password provided is correct. Which action accomplishes this task?

- A. Encrypt the username, hash the password, and store these values.
- B. Hash the username, hash the password, and store these values.
- C. Encrypt the username, encrypt the password, and store these values.
- D. Hash the username, encrypt the password, and store these values.

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

Section: Application Deployment and Security

QUESTION 62

While developing an application following the 12-factor app methodology, which approach should be used in the application for logging?

- A. Write a log to a file in the application directory.
- B. Write a log to a file in /var/log.
- C. Write the logs buffered to stdout.

D. Write the logs unbuffered to stdout.

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

Section: Application Deployment and Security

QUESTION 63

An application has initiated an OAuth authorization code grant flow to get access to an API resource on behalf of an end user. Which two parameters are specified in the HTTP request coming back to the application as the end user grants access? (Choose two.)

- A. access token and a refresh token with respective expiration times to access the API resource
- B. access token and expiration time to access the API resource
- C. redirect URI a panel that shows the list of permissions to grant
- D. code that can be exchanged for an access token
- E. state can be used for correlation and security checks

Correct Answer: AB

Section: (none)

Explanation

Explanation/Reference:

Section: Application Deployment and Security

QUESTION 64

A web application is susceptible to cross-site scripting. Which two methods allow this issue to be mitigated? (Choose two.)

- A. Use only drop downs.
- B. Limit user input to acceptable characters.
- C. Encrypt user input on the client side.
- D. Use AES encryption to secure the script.
- E. Remove all HTML/XML tags from user input.

Correct Answer: BD

Section: (none)

Explanation

Explanation/Reference:

Section: Application Deployment and Security

QUESTION 65

Refer to the exhibit. The Ansible playbook is using the netconf_module to configure an interface using a YANG model. As part of this workflow, which YANG models augment the interface?

```

- name: Configure Interfaces
  with_items: "{{interfaces}}"
  netconf_config:
    <<: *host_info
    xml: |
      <config>
        <interfaces xmlns="urn:ietf:params:xml:ns:yang:ietf-interfaces">
          <interface>
            <name>{{item.interface_type}}{{item.interface_id}}</name>
            <description>{{item.description}}</description>
            <type xmlns:ianaift="urn:ietf:params:xml:ns:yang:iana-if-type">ianaift:ethernetCsmacd</type>
            <enabled>true</enabled>
            <ipv4 xmlns="urn:ietf:params:xml:ns:yang:ietf-ip">
              <address>
                <ip>{{item.ip_address}}</ip>
                <netmask>{{item.subnet_mask}}</netmask>
              </address>
            </ipv4>
          </interface>
        </interfaces>
      </config>

```

- A. ietf-interfaces and ietf-ip
- B. iana-if-type and ietf-interfaces
- C. ietf-ip and openconfig-interface
- D. ietf-ip and iana-if-type

VCEUp

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:
 Section: Infrastructure and Automation

QUESTION 66

Refer to the exhibit. Which key value pair from the ios_ntp Ansible module creates an NTP server peer?

```

---
- name: IOS XE Configuration
  hosts: ios_xe
  connection: local
  gather_facts: false

  tasks:
  - name: IOS NTP
    ios_ntp:
      provider: "{{ creds }}"
      server: 10.0.255.10
      source_int: GigabitEthernet2
      logging: false

```

- A. state: present
- B. state: True

- C. config: present
- D. config: True

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
 Section: Infrastructure and Automation

QUESTION 67

Refer to the exhibit. The YAML represented is using the `ios_vrf` module. As part of the Ansible playbook workflow, what is the result when this task is run?

```
name: VRFs
ios_vrf:
  vrfs: "{{ local_vrfs }}"
  state: present
  purge: yes
```

- A. VRFs not defined in the `host_vars` file are removed from the device.
- B. VRFs not defined in the `host_vars` file are added to the device, and any other VRFs on the device remain.
- C. VRFs defined in the `host_vars` file are removed from the device.
- D. VRFs are added to the device from the `host_vars` file, and any other VRFs on the device are removed.

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:
 Section: Infrastructure and Automation

VCEUp

QUESTION 68

Refer to the exhibit. As part of the Ansible playbook workflow, several new interfaces are being configured using the `netconf_config` module. The task references the interface variables that are unique per device. In which directory is the YAML file with these variables found?

```
- name: Configure Interfaces
  with_items: "{{ interfaces }}"
  netconf_config:
    <<: *host_info
    xml: |
      <config>
        <interfaces xmlns="urn:ietf:params:xml:ns:yang:ietf-interfaces">
          <interface>
            <name>{{ item.interface_type }}{{ item.interface_id }}</name>
            <description>{{ item.description }}</description>
            <type xmlns:ianaift="urn:ietf:params:xml:ns:yang:iana-if-type">ianaift:ethernetCsmacd</type>
            <enabled>true</enabled>
            <ipv4 xmlns="urn:ietf:params:xml:ns:yang:ietf-ip">
              <address>
                <ip>{{ item.ip_address }}</ip>
                <netmask>{{ item.subnet_mask }}</netmask>
              </address>
            </ipv4>
          </interface>
        </interfaces>
      </config>
```

- A. host_vars directory
- B. home directory
- C. group_vars directory
- D. current working directory

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

Section: Infrastructure and Automation

QUESTION 69

A developer needs to configure an environment to orchestrate and configure. Which two tools should be used for each task? (Choose two.)

- A. Puppet for orchestration
- B. Terraform for orchestration
- C. Terraform for configuration
- D. Ansible for orchestration
- E. Ansible for configuration

Correct Answer: BE

Section: (none)

Explanation

Explanation/Reference:

Section: Infrastructure and Automation

QUESTION 70

Application sometimes store configuration as constants in the code, which is a violation of strict separation of configuration from code. Where should application configuration be stored?

- A. environment variables
- B. YAML files
- C. Python libraries
- D. Dockerfiles
- E. INI files

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

Section: Infrastructure and Automation

QUESTION 71

Refer to the exhibit. What is the output of this IOS-XE configuration program?

```

import sys, requests

URL = "http://ios-xe-mgmt.cisco.com:9443"
USER = 'root'
PASS = 'C!isco0123'

url = URL + "/restconf/data/ietf-interfaces:interfaces-state"
headers = {'content-type': 'application/yang-data+json', 'accept':
           'application/yang-data+json'
          }

try:
    result = requests.get(url, auth=(USER,PASS), headers=headers)
    r_json = result.json()
    flagDown = 0
    for record in r_json["ietf-interfaces:interfaces"]["interface"]:
        print("{0:<35}".format("interface: ") + record["name"], end="")
        print("{0:<5}".format("ip: "), end="")
        if('address' in record["ietf-ip:ipv4"]):
            print("{0:<15}".format(record["ietf-ip:ipv4"]["address"][0]["ip"]), end="")
        else:
            print("{0:<15}".format(record["No IPv4"], end="")
        print("{0:<9}".format("status: "), end="")
        print(str(record["enabled"]))
        if(record["enabled"]==False):
            flagDown=1
    print("")
    if(flagDown):
        print("At least one interface is down")
    else:
        print("All interfaces are up")

except:
    print("Exception: " + str(sys.exc_info()[0]) + " " + str(sys.exc_info()[1]))
    print("Error: " + str(result.status_code), result.text)

```

VCEUp

- A. interface operational status in IPv6 addresses
- B. interface administrative status in IPv4 addresses
- C. interface operational status in IPv4 addresses
- D. interface administrative status in IPv6 addresses

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

Section: Infrastructure and Automation

QUESTION 72

Which database type should be used to store data received from model-driven telemetry?

- A. BigQuery database
- B. Time series database
- C. NoSQL database
- D. PostgreSQL database

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

Section: Infrastructure and Automation

QUESTION 73

A heterogeneous network of vendors and device types needs automating for better efficiency and to enable future automated testing. The network consists of switches, routers, firewalls and load balancers from different vendors, however they all support the NETCONF/RESTCONF configuration standards and the YAML models with every feature the business requires. The business is looking for a buy versus build solution because they cannot dedicate engineering resources, and they need configuration diff and rollback functionality from day 1.

Which configuration management for automation tooling is needed for this solution?

- A. Ansible
- B. Ansible and Terraform
- C. NSO
- D. Terraform
- E. Ansible and NSO

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

Section: Infrastructure and Automation

QUESTION 74

An automated solution is needed to configure VMs in numerous cloud provider environments to connect the environments to an SDWAN. The SDWAN edge VM is provided as an image in each of the relevant clouds and can be given an identity and all required configuration via cloud-init without needing to log into the VM once online.

Which configuration management and/or automation tooling is needed for this solution?

- A. Ansible
- B. Ansible and Terraform
- C. NSO
- D. Terraform
- E. Ansible and NSO

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

Section: Infrastructure and Automation

QUESTION 75

DRAG DROP

An application is being built to collect and display telemetry streaming data. Drag and drop the elements of this stack from the left onto the correct element functions on the right.

Select and Place:

Answer Area

IOS-XE Device: IOS-XE Device	visualization platform
Elasticsearch: Elasticsearch	data collector
Kibana: Kibana	data generator
Python Application: Python Application	datastore

Correct Answer:

Answer Area

	Kibana: Kibana
	Python Application: Python Application
	IOS-XE Device: IOS-XE Device
	Elasticsearch: Elasticsearch

Section: (none)
Explanation

Explanation/Reference:

QUESTION 76
DRAG DROP

Drag and drop the **git** commands from the left into the correct order on the right to create a feature branch from the master and then incorporate that feature branch into the master.

Select and Place:

Answer Area

git branch -d feature	step 1
git checkout -b feature master	step 2
git checkout master	step 3
git push origin master	step 4
git merge --no-ff feature	step 5

Correct Answer:

Answer Area

	git checkout -b feature master
	git checkout master
	git merge --no-ff feature
	git push origin master
	git branch -d feature

Section: (none)

Explanation

Explanation/Reference:

QUESTION 77

DRAG DROP

Drag and drop the steps from the left into the correct sequence on the right to describe how to use Git to maintain the current HEAD and revert back to a previous commit, while undoing all intermediate commits.

Select and Place:

Answer Area

git commit -m "Revert to 56e05fced commit"	step 1
git reset --soft HEAD@{1}	step 2
git log	step 3
git reset --hard 56e05fced	step 4
git status	step 5

Correct Answer:

Answer Area

	git status
	git log
	git reset --soft HEAD@{1}
	git reset --hard 56e05fced
	git commit -m "Revert to 56e05fced commit"

Section: (none)
Explanation

Explanation/Reference:

QUESTION 78
DRAG DROP

Drag and drop the characteristics from the left onto the correct data processing techniques on the right, in the context of GDPR.

Select and Place:

Answer Area
VCEplus.com

processing of personal data in such a manner that the personal data can no longer be attributed to a specific data subject without the use of additional information

data stripped of sufficient elements such that the data subject can no longer be identified

can be re-identified

cannot be re-identified

Data anonymization

Data pseudonymization

Correct Answer:

Answer Area
VCEplus.com

Data anonymization

can be re-identified

data stripped of sufficient elements such that the data subject can no longer be identified

Data pseudonymization

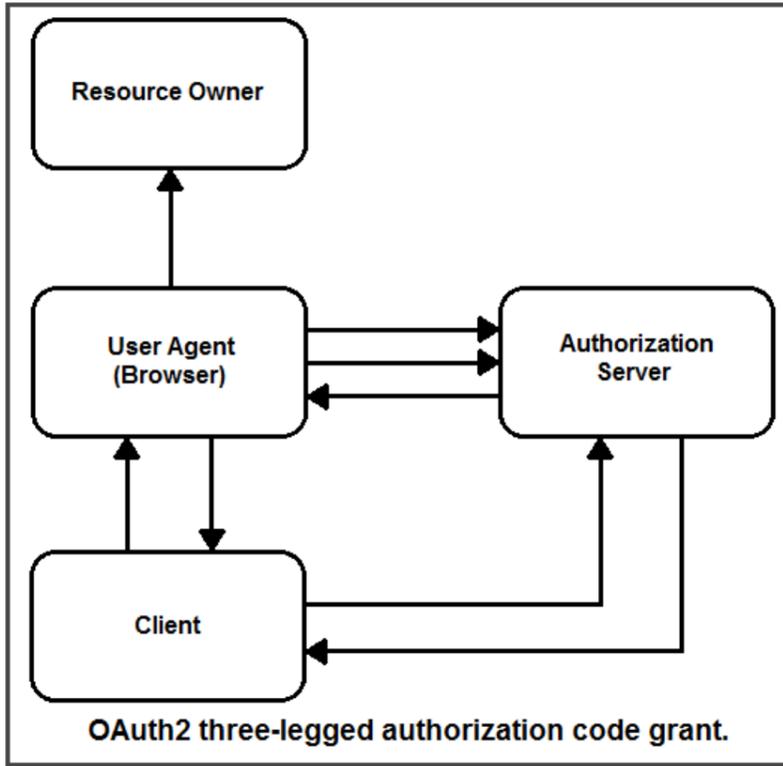
cannot be re-identified

processing of personal data in such a manner that the personal data can no longer be attributed to a specific data subject without the use of additional information

Section: (none)
Explanation

Explanation/Reference:

QUESTION 79
DRAG DROP



Refer to the exhibit. Drag and drop the steps from the left into the correct order of operation on the right for a successful OAuth2 three-legged authorization code grant flow.

Select and Place:

VCEUp

Answer Area

Client initiates the flow.	step 1
The authorization server authenticates the client, validates details sent, and responds with an access token.	step 2
The authorization server redirects the user-agent back to the client using the redirection URI provided.	step 3
The authorization server authenticates the resource owner.	step 4
The client requests an access token from the authorization server's token endpoint.	step 5

Correct Answer:



	Client initiates the flow.
	The authorization server redirects the user-agent back to the client using the redirection URI provided.
	The authorization server authenticates the resource owner.
	The client requests an access token from the authorization server's token endpoint.
	The authorization server authenticates the client, validates details sent, and responds with an access token.

Section: (none)
Explanation

Explanation/Reference:

QUESTION 80
DRAG DROP



GET	/dna/intent/api/v1/wireless/profile	Get Wireless Profile
Gets either one or all the wireless network profiles if no name is provided for network-profile.		
Parameters		
Name	Description	
profileName string (query)	<i>Default value:</i>	
Responses		
Code	Description	
200	<i>The request was successful. The result is contained in the response body.</i>	
Example Value Model		
<pre>[{ "profileDetails": { "name": "string", "sites": ["string"], "ssidDetails": [{ "name": "string", "type": "Guest", "enabledFabric": true, "flexConnect": { "enableFlexConnect": true, "localToVlan": 0 }, "InterfaceName": "string" }] } }]</pre>		

```

import requests
import json

def get_dnac_wireless_profiles():
    try:
        url = "https://sandboxdnac2.cisco.com/dna/intent/api/v1" \
            + "/wireless/profile?<item1>=ChicagoCampus|"

        print(token)
        payload = {}
        headers = {
            'x-auth-token': token
        }

        response = requests.request("GET", url, headers=headers, data = payload)
        response.raise_for_status()
        return response.json()[0][<item 2>][<item 3>] \
            [<item 4>][<item 5>][<item 6>]

    except Exception as e:
        print(e)

def create_dnac_token():
    try:
        url = "https://sandboxdnac2.cisco.com/dna/system/api/v1/auth/token"

        payload = {}
        headers = {
            'Authorization': 'Basic ZGV2bmV0dXNlcjpaXNjbzEyMyE= ',
            'Content-Type': 'application/json'
        }

        response = requests.request("POST", url, headers=headers, data = payload)
        response.raise_for_status()
        return response.json()["Token"]

    except Exception as e:
        print(e)

if __name__ == "__main__":
    token = create_dnac_token()
    print(get_dnac_wireless_profiles())

```

VCEUp

Refer to the exhibit. The Python script is supposed to make an API call to Cisco DNA Center querying a wireless profile for the "ChicagoCampus" and then parsing out its enable FlexConnect value. Drag and drop the parts of the Python code from the left onto the item numbers on the right that match the missing sections in the exhibit.

Select and Place:

Answer Area

0	<item 1>
ssidDetails	<item 2>
profileDetails	<item 3>
profileName	<item 4>
flexConnect	<item 5>
enableFlexConnect	<item 6>

Correct Answer:

Answer Area

	profileName
	ssidDetails
	profileDetails
	0
	flexConnect
	enableFlexConnect

Section: (none)
Explanation

Explanation/Reference:

QUESTION 81
DRAG DROP

Drag and drop the expressions from below onto the code to implement error handling. Not all options are used.

Select and Place:

Answer Area

```

base_url = "https://api.meraki.com/api/v0"
posturl = '%s/networks/%s/staticRoutes' % ((str(base_url), str(networked)))
headers = {
    'x-cisco-meraki-api-key': api_key,
    'Content-Type': 'application/json'
}
routes = [ {
    "subnet": "10.16.4.0/22",
    "gatewayIp": "10.1.0.20",
    "name": "ROUTE1",
    "enabled": true
    }
    {
    "subnet": "10.253.254.0/24",
    "gatewayIp": "10.1.0.20",
    "name": "ROUTE2",
    "enabled": true
    }
    {
    "subnet": "10.168.0.0/21",
    "gatewayIp": "10.1.0.20",
    "name": "ROUTE3",
    "enabled": true
    }
]

for route in routes:
    print("Adding static: " + str(route['subnet']))
    response = requests.post(posturl, json=route, headers=headers)
    
    print("Done!")
    
    print("Failed to add static: " + str(route['subnet']) + "\n" + response.text)

```

if response == 601: else: when:

if response == 201: elif:

Correct Answer:

Answer Area

```

base_url = "https://api.meraki.com/api/v0"
posturl = '%s/networks/%s/staticRoutes' % ((str(base_url), str(networked)))
headers = {
    'x-cisco-meraki-api-key': api_key,
    'Content-Type': 'application/json'
}
routes = [ {
    "subnet": "10.16.4.0/22",
    "gatewayIp": "10.1.0.20",
    "name": "ROUTE1",
    "enabled": true
    }
    {
    "subnet": "10.253.254.0/24",
    "gatewayIp": "10.1.0.20",
    "name": "ROUTE2",
    "enabled": true
    }
    {
    "subnet": "10.168.0.0/21",
    "gatewayIp": "10.1.0.20",
    "name": "ROUTE3",
    "enabled": true
    }
]

for route in routes:
    print("Adding static: " + str(route['subnet']))
    response = requests.post(posturl, json=route, headers=headers)
    if response == 201:
        print("Done!")
        clsc:
    print("Failed to add static: " + str(route['subnet']) + "\n" + response.text)

```

if response == 601:

when:

elif:

Section: (none)
Explanation

Explanation/Reference:

QUESTION 82
DRAG DROP

Description

The addNetworkObject operation handles configuration related to [NetworkObject](#) model.
This API call is not allowed on the standby unit in an HA pair.

HTTP request

URL

```
POST /api/fdm/v4/object/networks
```

Data Parameters

Parameter	Required	Type	Description
name	True	string	A string that is the name of the network object.
description	False	string	A string containing the description information. Field level constraints: length must be between 0 and 200 (inclusive). (Note: Additional constraints might exist)
subType	True	string	An enum value that specifies the network object type. HOST - A host type. NETWORK - A network type. FQDN - A FQDN type. RANGE - A range type. Field level constraints: cannot be null. (Note: Additional constraints might exist)
value	True	string	A string that defines the address content for the object. For HOST objects, this is a single IPv4 or IPv6 address without netmask or prefix. For NETWORK objects, this is an IPv4 or IPv6 network address with netmask (in CIDR notation) or prefix. For FQDN objects, this is a Fully qualified domain name. For RANGE objects, this is IPv4 or IPv6 addresses separated by '-'. Field level constraints: cannot be null, must match pattern ^((?!:).)*\$ (Note: Additional constraints might exist)
isSystemDefined	False	boolean	A Boolean value. TRUE or FALSE(the default). The TRUE value indicated that this Network object is a system defined object.
dnsResolution	False	string	DNS Resolution type can be IPV4_ONLY, IPV6_ONLY or IPV4_AND_IPV6.
type	True	string	A UTF8 string, all letters lower-case, that represents the class-type. This corresponds to the class name.

```
curl -X <item 1> -H "Authorization: Bearer exwsxads-sadads0as0d0-1w-1-1w-1w" --header
'Content-Type: application/json' --header 'Accept: application/json' -d '{
  "name": "171.168.1.z",
  "value": "<item 2>",
  "subType": "<item 3>",
  "type": "<item 4>"
}' 'https://ast0072-pod.cisco.com:33333/api/fdm/v4/object/<item 5>
```

Refer to the exhibit. Drag and drop the code snippets from the left onto the item numbers on the right that match the missing sections in the cURL exhibit to complete the cURL request to FirePower Device Manager API to create objects. Not all code snippets are used.

Select and Place:

Answer Area

HOST	<item 1>
POST	<item 2>
NETWORK	<item 3>
networks	<item 4>
networkobject	<item 5>
171.168.1.0/24	
False	
isSystemDefined	

Correct Answer:

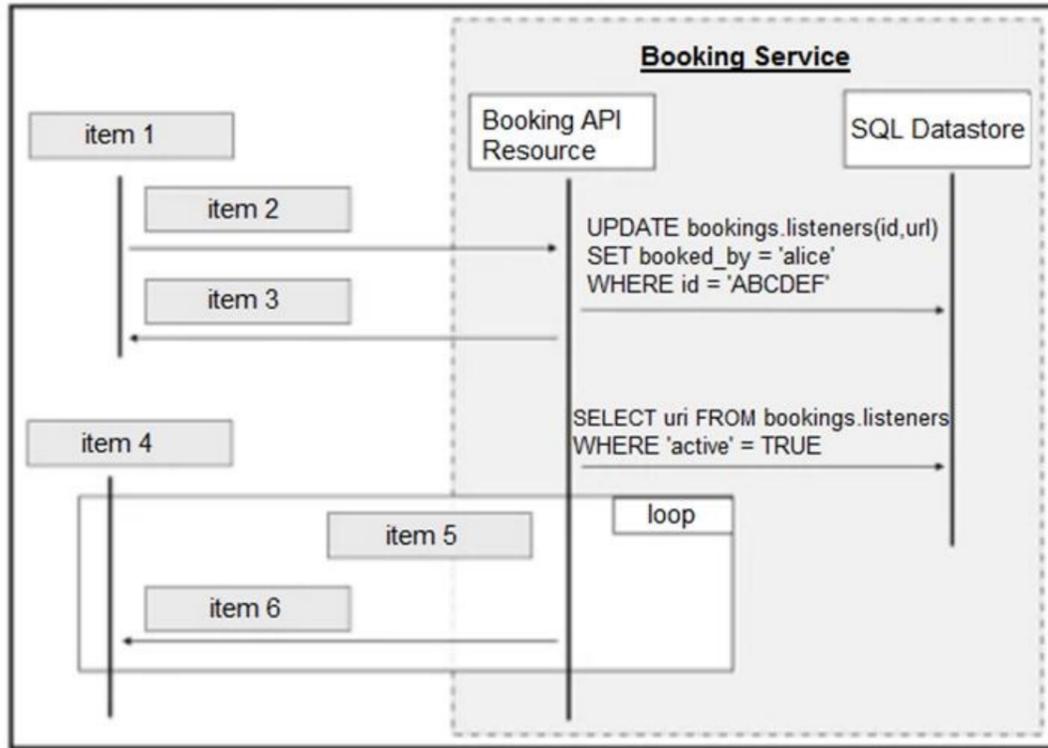
Answer Area

HOST	POST
	171.168.1.0/24
NETWORK	False
	networks
networkobject	isSystemDefined

Section: (none)
 Explanation

Explanation/Reference:

QUESTION 83
 DRAG DROP



VCEUp

Refer to the exhibit above and click on the tab in the top left corner to view a diagram that describes the typical flow of requests involved when a webhook is created for a booking service. Drag and drop the requests from the left onto the item numbers on the right that match the missing sections in the sequence diagram to design the complete flow of requests involved as a booking is updated from a web application.

Select and Place:

Answer Area

Web Application	item 1
POST <listener.uri> { "bookingId": "ABCDEF" }	item 2
PATCH /bookings/ABCDEF { "bookedBy": "alice" }	item 3
Webhook Listener	item 4
204 NO CONTENT	item 5
[for each listener]	item 6

Correct Answer:

Answer Area

	Web Application
	PATCH /bookings/ABCDEF { "bookedBy": "alice" }
	POST <listener.uri> { "bookingId": "ABCDEF" }
	Webhook Listener
	[for each listener]
	204 NO CONTENT

Section: (none)
Explanation

Explanation/Reference:

QUESTION 84
DRAG DROP

```
*** Instantiate a UCS Service Profile from template and associate ***
from ucsmsdk.ucshandle import UcsHandle
from ucsmsdk.mometa.ls.LsBinding import LsBinding
from ucsmsdk.mometa.ls.LsServer import LsServer

HANDLE = <item1>[
    "ucs-devcore.cisco.com",
    "admin",
    "password"
]

HANDLE.<item2>()

SP_FROM_TEMPLATE = <item 3>({
    parent_mo_or_dn='org-root/org-devnet',
    name="devcore-server-01",
    sre_tmpl_name="devcore_template",
    type="instance"
})

LsBinding(
    parent_mo_or_dn=<item 4>,
    pn_dn="sys/chassis-7/blade-3"
)

HANDLE.<item 5>(SP_FROM_TEMPLATE, modify_present=True)
HANDLE.<item 6>()

HANDLE.<item 7>()
```

VCEUp

Refer to the exhibit above and click on the resource tabs in the top left corner to view resources to help with this question. Python code that uses the UCS Python SDK is instantiating a service profile named "devcore-server-01" from service profile template "devcore_template", then associating the service profile instance to blade 3 in chassis 7. Drag and drop the code snippets from the left onto the item numbers on the right that match the missing sections in the Python exhibit.

Select and Place:

logout	<item 1>
login	<item 2>
commit	<item 3>
add_me	<item 4>
UcsHandle	<item 5>
LsServer	<item 6>
SP_FROM_TEMPLATE	<item 7>

Correct Answer:

	UcsHandle
	login
	add_me
	LsServer
	SP_FROM_TEMPLATE
	logout
	commit

Section: (none)

Explanation

Explanation/Reference:

QUESTION 85
DRAG DROP

```
def set_ssid_settings(network_id, wireless_name, wireless_password):  
    """Configure an SSID to use the External Captive Portal."""  
    base_url = "https://api.meraki.com/api/v0/"  
    response = requests.put(  
        base_url + "/" + Item 1 + "/" + Item 2 + "/" + Item 3 + "/0",  
        headers={  
            "X-Cisco-Meraki-API-Key": MERAKI_API_KEY,  
            "Content-Type": "application/json"  
        },  
        json={  
            "number": 0,  
            "name": wireless_name,  
            "enabled": True,  
            "splashPage": "Item 4",  
            "ssidAdminAccessible": False,  
            "authMode": "Item 5",  
            "psk": wireless_password,  
            "encryptionMode": "wpa",  
            "wpaEncryptionMode": "WPA2 only",  
            "ipAssignmentMode": "Bridge mode",  
            "useVlanTagging": False,  
            "walledGardenEnabled": True,  
            "walledGardenRanges": "Item 6",  
            "minBitrate": 11,  
            "bandSelection": "Item 7",  
            "perClientBandwidthLimitUp": 0,  
            "perClientBandwidthLimitDown": 0  
        },  
    )  
    response.raise_for_status()
```

VCEUp

Refer to the exhibit above and click on the Meraki Resources tab in the top left corner to view Meraki documentation to help with this question. Drag and drop the parts of the Python code from the left onto the item numbers on the right that match the missing sections in the exhibit to enable an SSID. Not all code parts are used.

Select and Place:

ssids	<item 1>
org_id	<item 2>
networks	<item 3>
network_id	<item 4>
192.168.0.1/32	<item 5>
Click-through splash page	<item 6>
5 GHz band only	<item 7>
psk	
organizations	

Correct Answer:

✓CEplus.com ssids	network_id
org_id	networks
	organizations
	Click-through splash page
	psk
	192.168.0.1/32 ✓c
	5 GHz band only

Section: (none)
Explanation

Explanation/Reference:

QUESTION 86
DRAG DROP

Create a Message

Post a plain text or [rich text](#) message, and optionally, a [file attachment](#) attachment, to a room.

The `files` parameter is an array, which accepts multiple values to allow for future expansion, but currently only one file may be included with the message.

POST /v1/messages

Body Parameters

`roomId`

string

The room ID of the message.

`toPersonId`

string

The person ID of the recipient when sending a private 1:1 message.

`toPersonEmail`

string

The email address of the recipient when sending a private 1:1 message.

`text`

string

The message, in plain text. If `markdown` is specified this parameter may be *optionally* used to provide alternate text for UI clients that do not support rich text. The maximum message length is 7439 bytes.

`markdown`

string

The message, in Markdown format. The maximum message length is 7439 bytes.

```
#!/bin/bash
curl item 1 https://api.ciscopark.com/v1/messages \
  -H item 2 \
  -H item 3 NMU4NjQ0YWUtNjy_P..._1eb6574-ad72cae0e10f' \
  -d '{ item 4 ": "cisco@usa.net", "text": "Intruder Alert!" }'
```

VCEUp

Refer to the exhibit. A system administrator has installed a Linux-based alarm system in their home that can execute a Bash shell script when an intruder is detected. Drag and drop the code snippets from the left onto the item numbers on the right that match the missing sections in the exhibit to create a chat-ops script that will notify of alarms via the Webex Teams REST API. Not all code snippets are used.

Select and Place:

Answer Area

toPersonEmail	<item 1>
userName	<item 2>
-X POST	<item 3>
-X PUT	<item 4>
Content-Type: application/json	
Content-Type: application/xml	
Authorization: Basic	
Authorization: Bearer	

Correct Answer:

Answer Area

toPersonEmail	-X POST
	Authorization: Bearer
	Content-Type: application/json
-X PUT	userName
Content-Type: application/xml	
Authorization: Basic	

Section: (none)

Explanation

Explanation/Reference:

QUESTION 87

DRAG DROP

```

RETRIES = 6
i = 0
backoff = 1

while True:
    try:
        response = requests.request(*args, **kwargs)
        response.raise_for_status()
        return response
    except Exception as e:
        if (response.status_code != <item 1>) or i == <item 2>:
            return response

        time.sleep(<item 3>)
        <item 4> *= 2
        <item 5> += 1
    
```

Refer to the exhibit. The self-service Webex Teams bot is failing when many users attempt to interact with it at the same time. Drag and drop the code snippets from the left onto the correct item numbers on the right that match the missing sections in the exhibit to complete this code to handle this high-load situation.

Select and Place:

VCEup

Answer Area

429	<item 1>
backoff	<item 2>
backoff	<item 3>
RETRIES	<item 4>
i	<item 5>

Correct Answer:

Answer Area

Section: (none)

Explanation

Explanation/Reference:

QUESTION 88

DRAG DROP

```
import request, time
bearer = "BEARER_TOKEN_HERE"
url = 'https://api.ciscopark.com/v1/rooms'
headers = {'content-type': 'application/yang-data+json',
           'accept': 'application/yang-data+json',
           "Authorization": "Bearer "+bearer}

while True:
    response = requests.get(url, headers=headers, verify=False)
    status = <item 1>
    if(status == 200):
        print("Success")
        break
    elif(status == <item 2>):
        sleep_time = int(<item 3>)
        print('Too Many requests. Sleeping for ', sleep_time, '<item 4>')
        time.sleep(sleep_time)
    else:
        print("Error code" + str(status) + "detected.")
        break
```

VCEUp

Refer to the exhibit. A developer is creating a Python script to use the Webex Teams REST API to list joined spaces, retry after the server-specified amount of time if a "Too many requests" response is received, and print any other error that is received. Drag and drop the code snippets from the left onto the item numbers on the right that match the missing sections in the exhibit to complete the script. Not all code snippets are used.

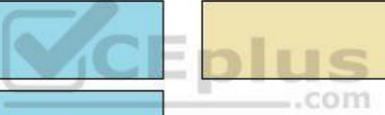
Select and Place:

Answer Area



- 405
- 429
- minutes
- seconds
- response.headers['Retry-After']
- response.header
- response.status_code
- response.status

- <item 1>
- <item 2>
- <item 3>
- <item 4>



Correct Answer:

VCEUp

Answer Area



- 405
- minutes
- response.header
- response.status

- response.status_code
- 429
- response.headers['Retry-After']
- seconds



Section: (none)

Explanation

Explanation/Reference:

QUESTION 89

DRAG DROP

Drag and drop the code onto the snippet to update a SSID in Meraki using the Dashboard API. Not all options are used.

Select and Place:

Answer Area

```
base_url = "https://api.meraki.com/api/v0"
network_id = "N_1234567890"
requests.put(
    [ ] + " /networks/" + [ ] + "/ssids/0",
    headers = {
        "X-Cisco-Meraki-API-Key": [ ],
        "Content-Type": "[ ]"
    },
    data = json.dumps ({
        "number": 0,
        "name": ssid,
        "enabled": True,
        "authMode": "psk",
        "psk": [ ],
        "[ ]": "wpa",
        "wpaEncryptionMode": "WPA2 only"
    })
)
```

application/json

organization_id

network_id

wireless_password

base_url

api_key

encryptionMode



Correct Answer:

Answer Area

```

base_url = "https://api.meraki.com/api/v0"
network_id = "N_1234567890"
requests.put(
    [base_url] + " /networks/" + [network_id] + "/ssids/0",
    headers = {
        "X-Cisco-Meraki-API-Key": [api_key] ,
        "Content-Type": " application/json "
    },
    data = json.dumps ({
        "number": 0,
        "name": ssid,
        "enabled": True,
        "authMode": "psk",
        "psk": [wireless_password] ,
        "[encryptionMode] ": "wpa",
        "wpaEncryptionMode": "WPA2 only"
    })

```

[organization_id]

VCEUp



Section: (none)
Explanation

Explanation/Reference:

QUESTION 90
DRAG DROP

```

def process_all_pages(url):
    data = []
    try:
        response = requests.get(url)
        if <item 1> == 200:
            while <item 2>:
                response = requests.get(<item 3>)
                response.raise_for_status()
                data.append(response.json())
            return data
    except Exception as e:
        print("Server returned non-200 OK response during pagination")

```

Refer to the exhibit. Drag and drop the parts of the Python code from the left onto the item numbers on the right that match the missing sections in the exhibit that consumes REST API pagination.

Select and Place:

Answer Area

response.status_code	<item 1>
response.links['next']['url']	<item 2>
response.headers.get('Link')	<item 3>

Correct Answer:

Answer Area

	response.status_code
	response.headers.get('Link')
	response.links['next']['url']

Section: (none)
Explanation

Explanation/Reference:

QUESTION 91
DRAG DROP

```

<item 1> python:3.6-alpine
<item 2> . .
<item 3> pip install -r requirements.txt
<item 4> 5001
<item 5> ["python", "app.py"]
    
```

Refer to the exhibit. Drag and drop the correct parts of the Dockerfile from the left onto the item numbers on the right that match the missing sections in the exhibit to complete the Dockerfile to successfully build and deploy a container running a Python application. Not all parts of the Dockerfile are used.

Select and Place:

Answer Area

ENV	<item 1>
CMD	<item 2>
RUN	<item 3>
COPY	<item 4>
VOLUME	<item 5>
FROM	
WORKDIR	
EXPOSE	

Correct Answer:

Answer Area

ENV	FROM
	COPY
	RUN
	EXPOSE
VOLUME	CMD
WORKDIR	

Section: (none)

Explanation

Explanation/Reference:

QUESTION 92

DRAG DROP

```
import threading
import requests

def get_device_list(endpoint, apikey):
    url = "https://api.meraki.com/api/v0/networks/" + endpoint
    hdr = {'x-cisco-meraki-api-key': format(str(apikey)), 'Content-Type':
'application/json'}
    response = requests.get(url=url, headers=hdr)
    print(response.json())

if __name__ == "__main__":
    # creating thread
    thread = <item 1>(<item2>=get_device_list,
<item 3>=("NETWORK_ID/devices","API_TOKEN"))

    thread.<item 4>
    thread.<item 5>
```

Refer to the exhibit. Python threading allows a developer to have different parts of a program run concurrently and simplify a design. Drag and drop the code snippets from the left onto the item numbers on the right that match the missing sections in the exhibit to create a thread instance.

Select and Place:

Answer Area

join()	<item 1>
threading.Thread	<item 2>
start()	<item 3>
target	<item 4>
args	<item 5>

Correct Answer:

Answer Area

threading.Thread

target

args

start()

join()

Section: (none)

Explanation

Explanation/Reference:

QUESTION 93

DRAG DROP

```
import requests

url = "https://api.ciscospark.com/v1/rooms"
bearer = "BEARER_TOKEN_HERE"
headers = {"content-type": "application/json", "Authorization": "Bearer " + bearer}

<item 1>:
    response = requests.get(url, headers=headers, verify=False)
    response.<item 2>
<item 3> requests.exceptions.HTTPError as err:
    if response.status_code == <item 4>:
        print("Check Bearer Token")
    elif response.status_code == <item 5>:
        print("Check API Endpoint uri")
    elif response.status_code == 500:
        print("Server Error, Try again Later")
    else:
        print("HTTP Error") + str(err)
```

A developer is creating a Python script to use the Webex Teams REST API to list joined spaces, and gracefully handle and print the errors it receives. Drag and drop the code snippets from the left onto the item numbers on the right that match the missing sections in the exhibit to complete the script.

Select and Place:

Answer Area

401	<item 1>
404	<item 2>
try	<item 3>
except	<item 4>
raise_for_status()	<item 5>

Correct Answer:

Answer Area

	try
	raise_for_status()
	except
	401
	404

Section: (none)

Explanation

Explanation/Reference:

QUESTION 94

DRAG DROP

```
#!/usr/bin/python3
import requests, sys

head = { 'Content-Type': '<item 1>',
        'Authorization': 'Bearer NWU4NjQ0ODJkZTItM...4-ad72cae0e10f' }

res = requests.post(url = 'https://api.ciscopark.com/v1/<item 2>',
                    headers = head, json = { '<item 3>': sys.argv[1] })
spaceId = res.json()['id']

members = [ 'johndoe@example.com', 'janedoe@example.com' ]
for member in members:
    res = requests.post(url='https://api.ciscopark.com/v1/<item 4>',
                        headers = head,
                        json = { 'roomId' spaceId, '<item 5>': member})
```

Refer to the exhibit above and click on the resource tabs in the top left corner to view resources to help with this question.

Create a Room

Creates a room. The authenticated user is automatically added as a member of the room. See the [Memberships API](#) to learn how to add more people to the room.

To create a 1:1 room, use the [Create Messages](#) endpoint to send a message directly to another person by using the `toPersonId` or `toPersonEmail` parameters.

POST /v1/rooms

Body Parameters

title

string **Required**

A user-friendly name for the room.

teamId

string

The ID for the team with which this room is associated.

Create a Membership

Add someone to a room by Person ID or email address; optionally making them a moderator.

POST /v1/memberships

Body Parameters

roomId

string **Required**
The room ID.

personId

string
The person ID.

personEmail

string
The email address of the person.

isModerator

boolean
Whether or not the participant is a room moderator.

A developer is creating a Python Script that will use the Webex Teams REST API to automatically create a new collaboration space with him and his team leads on-demand via a Linux terminal command. Drag and drop the code snippets from the left onto the numbers on the right that match the missing sections in the exhibit to complete the script. Not all code snippets are used.

Select and Place:

Answer Area
CEplus.com

application/xml	<item 1>
application/json	<item 2>
name	<item 3>
userName	<item 4>
title	<item 5>
personEmail	
/members	
/memberships	
/rooms	
/spaces	

Correct Answer:

Answer Area
CEplus.com

application/xml

application/json

name

/rooms

title

userName

/memberships

personEmail

/members

/spaces

Section: (none)
Explanation

Explanation/Reference:

QUESTION 95
DRAG DROP

Description

The addURLObject operation handles configuration related to [URLObject](#) model.
This API call is not allowed on the standby unit in an HA pair.

HTTP request**URL**

```
POST /api/fdm/v4/object/urls
```

Data Parameters

Parameter	Required	Type	Description
name	True	string	An string represents the name of URL object.
description	False	string	An string containing the description information of URL object. Field level constraints: length must be between 0 and 200 (inclusive). (Note: Additional constraints might exist)
url	True	string	An string value containing the URL address. Field level constraints: cannot be blank or empty, length must be between 0 and 400 (inclusive). (Note: Additional constraints might exist)
type	True	string	A UTF8 string, all letters lower-case, that represents the class-type. This corresponds to the class name.

```
curl -x <item 1> --header 'Content-Type: application/json' --header
'Accept: application/json' -H "<item 2>" -d '{ \
  "name": "Blocked URL", \
  "url": "<item 3>", \
  "type": "<item 4>" \
}' 'https://ast0072-pod.xyz.com:33333/api/fdm/v4/object/<item 5>'
```

Refer to the exhibit. Drag and drop the code snippets from the left onto the item numbers on the right that match the missing sections in the curl exhibit to complete the cURL request to FirePower Device Manager API to create objects. Not all code snippets are used.

VCEUp

Select and Place:

Answer Area
VCEplus.com

PUT	<item 1>
POST	<item 2>
False	<item 3>
urls	<item 4>
urlobject	<item 5>
description	
Authorization: Bearer exwsxads-sadads0as0d0-1w-1-1w-1-w	
https://www.internetbadguys.com	

Correct Answer:

Answer Area
VCEplus.com

PUT	POST
	Authorization: Bearer exwsxads-sadads0as0d0-1w-1-1w-1-w
	https://www.internetbadguys.com
urls	False
	urlobject
description	

Section: (none)

Explanation

Explanation/Reference:

QUESTION 96

DRAG DROP

```

module: Cisco-IOS-XE-vlan
augment /ios:native/ios:vlan:
  +--rw access-map* [name]
  | +--rw name      string
  | +--rw value?   uint16
  | +--rw action?  enumeration
  | +--rw match
  | | +--rw ipv6
  | | | +--rw address*  string
  | | | +--rw ip
  | | | +--rw address*  string
  +--rw configuration* [vlan-id]
  | +--rw vlan-id    union
  | +--rw ip
  | | +--rw flow
  | | | +--rw monitor* [flow-monitor]
  | | | | +--rw flow-monitor  string
  | | | | +--rw input?        empty
  | | | | +--rw output?       empty
  | | +--rw ipv6
  | | | +--rw nd
  | | | | +--rw suppress!
  | | | | | +--rw attach-policy?  string
  | | | +--rw dhcp
  | | | | +--rw guard!
  | | | | | +--rw attach-policy?  string
  | +--rw member
  | | +--rw evpn-instance
  | | | +--rw evpn-instance?  uint16
  | | | +--rw vni?            uint32
  | | +--rw vni?              uint32
  +--rw filter* [word]

```

<https://ios-xe-mgmt.cisco.com:9443/<item 1>/<item 2>/<item 3>/<item 4>/>

VCEUp

Refer to the exhibit. Drag and drop parts of the URL from the left onto the item numbers on the right that match the missing sections in the exhibit to create the appropriate RESTCONF URL to query the VLAN configuration given this YANG model. Not all URL parts are used.

Select and Place:

Answer Area

vlan	<item 1>
restconf	<item 2>
interfaces	<item 3>
data	<item 4>
native	

CEplus.com

Correct Answer:

Answer Area

	restconf
	data
interfaces	native
	vlan

VCEUp

CEplus.com

Section: (none)
Explanation

Explanation/Reference:

QUESTION 97

```

import json, requests
USER = 'admin'
PASS = 'cisco'

url = "https://ios-xe-mgmt.cisco.com:9443/restconf/data/Cisco-IOS-XE-native" \
      "/interface/GigabitEthernet=2/ip/address/primary"

payload = {"primary": {"address": "10.10.10.1", "mask": "255.255.255.0"}}
data = json.dumps(payload)
headers = {
    'Accept': "application/yang-data+json",
    'Content-Type': "application/yang-data+json",
}

response = requests.request(" ", url, auth=(USER,PASS), data=data, headers=headers,
                            verify=False)

print(response.text)

```

Refer to the exhibit. Which RESTCONF verb changes the GigabitEthernet2 interface from 192.168.100.1/24 to 10.10.10.1/24?

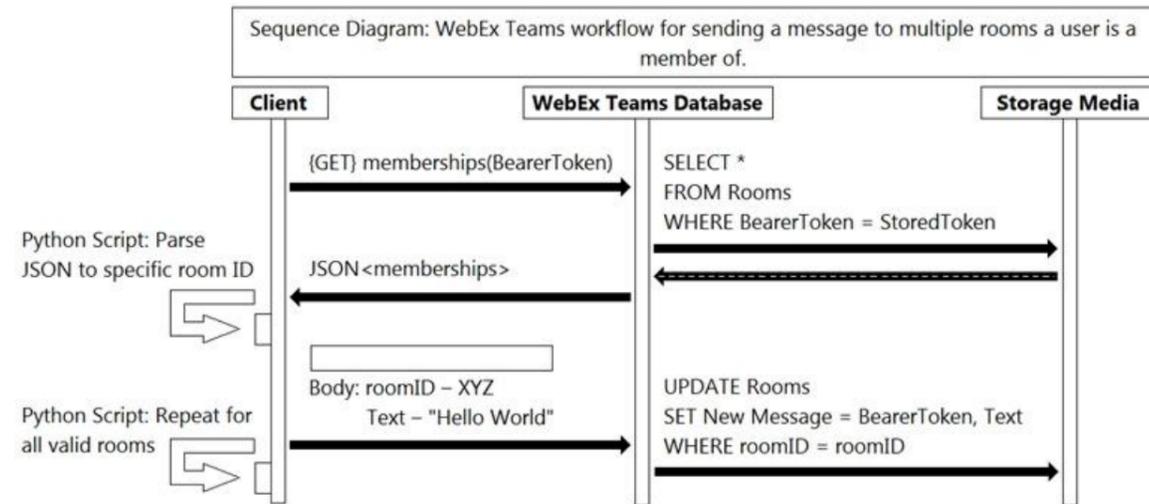
- A. POST
- B. PATCH
- C. GET
- D. HEAD

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
 Section: Mixed Questions

Reference: <https://blogs.cisco.com/developer/python-scripting-apis>

QUESTION 98



Refer to the exhibit. Which action will complete the workflow that represents how an API call sends multiple messages?

- A. {PUT} messages(roomID)
- B. {PUT} messages(BearerToken)
- C. {POST} messages(roomID)
- D. {POST} messages(BearerToken)

Section: Mixed Questions

QUESTION 100

Which tool is used to deploy an IOx application to a group of IOx devices at one time?

- A. ioxclient
- B. IOx local manager
- C. Fog Network Director
- D. Kubernetes

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

Section: Mixed Questions

QUESTION 101

```
curl "http://localhost/api/[ ]"
```

Refer to the exhibit. An application's REST API GET call is tested to the inventory database.

Which missing code must be included to limit the number of values that are returned from the query to 20?

- A. ?inventory=20
- B. inventory?limit=20
- C. limit=?20
- D. inventory=limit?20

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

Section: Mixed Questions

QUESTION 102

Which two design considerations should be considered when building a Cisco Meraki dashboard out of available APIs? (Choose two.)

- A. If the API key is shared, it cannot be regenerated.
- B. The API requests require the key and the user credentials.
- C. API call volume is rate-limited to five calls per second per organization.
- D. The API version does not need to be specified in the URL.
- E. Access to the API must first be enabled by using the settings for an organization.

Correct Answer: BE

Section: (none)

Explanation

Explanation/Reference:

Section: Mixed Questions

QUESTION 103

A developer plans to create a new bugfix branch to fix a bug that was found on the release branch. Which command completes the task?

- A. git checkout -t RELEASE BUGFIX
- B. git checkout -b RELEASE BUGFIX

- C. git checkout -t BUGFIX RELEASE
- D. git checkout -b BUGFIX RELEASE

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

Section: Mixed Questions

QUESTION 104

What are two advantages of using model-driven telemetry, such as gRPC, instead of traditional telemetry gathering methods? (Choose two.)

- A. all data is ad-hoc
- B. decentralized storage of telemetry
- C. efficient use of bandwidth
- D. no overhead
- E. continuous information with incremental updates

Correct Answer: CD

Section: (none)

Explanation

Explanation/Reference:

Section: Mixed Questions

Reference: <https://www.cisco.com/c/en/us/support/docs/routers/asr-9000-series-aggregation-services-routers/215321-asr9k-model-driven-telemetry-whitepaper.html>

QUESTION 105

A bot has been created, to respond to alarm messages. A developer is now creating a Webhook to allow the bot to respond to messages. Which format allows the Webhook to respond to messages for the bot within Webex Teams?

- A. GET /messages?personId=me&roomId=NETWORK_STATUS
Authorization: Bearer THE_BOTS_ACCESS_TOKEN
- B. GET /messages?mentionedPeople=me&roomId=NETWORK_STATUS
Authorization: Bearer THE_BOTS_ACCESS_TOKEN
- C. GET /messages?mentionedBot=me&roomId=NETWORK_STATUS
Authorization: Bearer THE_BOTS_ACCESS_TOKEN
- D. GET /messages?botId=me&roomId=NETWORK_STATUS
Authorization: Bearer THE_BOTS_ACCESS_TOKEN

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

Section: Mixed Questions

QUESTION 106

```

import json, requests
USER = 'admin'
PASS = 'cisco'

url = "https://ios-xe-mgmt.cisco.com:9443/restconf/data/Cisco-IOS-XE-native" \
      "/interface/GigabitEthernet=2/ip/address/primary"

payload = {"primary": {"address": "10.10.10.1", "mask": "255.255.255.0"}}
data = json.dumps(payload)
headers = {
    'Accept': "application/yang-data+json",
    'Content-Type': "application/yang-data+json",
}
response = requests.request("POST", url, auth=(USER,PASS), data=data, headers=headers,
                            verify=False)
print(response.text)

```

Refer to the exhibit. An engineer needs to change the IP address via RESTCONF on interface GigabitEthernet2. An error message is received when the script is run.

Which amendment to the code will result in a successful RESTCONF action?

- A. Change POST to PATCH
- B. Issue a DELETE before POST
- C. Issue a DELETE before PATCH
- D. Change POST to GET

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

Section: Mixed Questions

QUESTION 107

Why is end-to-end encryption deployed when exposing sensitive data through APIs?

- A. Data transfers are untraceable from source to destination.
- B. Data cannot be read or modified other than by the true source and destination.
- C. Server-side encryption enables the destination to control data protection.
- D. Traffic is encrypted and decrypted at every hop in the network path.

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

Section: Mixed Questions

QUESTION 108

A team of developers created their own CA and started signing certificates for all of their IoT devices. Which action will make the browser accept these certificates?

- A. Install a TLS instead of SSL certificate on the IoT devices.
- B. Set the private keys 1024-bit RSA.
- C. Preload the developer CA on the trusted CA list of the browser.
- D. Enable HTTPS or port 443 on the browser.

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:
Section: Mixed Questions

QUESTION 109

Which Git command enables the developer to revert back to f414f31 commit to discard changes in the current working tree?

- A. git reset --hard f414f31
- B. git reset checkout --hard f414f31
- C. git reset --soft f414f31
- D. git checkout f414f31

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
Section: Mixed Questions

Reference: <https://www.freecodecamp.org/news/the-ultimate-guide-to-git-reset-and-git-revert/>

QUESTION 110

HTTP request

URL

Data Parameters

Parameter	Required	Type	Description
name	True	string	A mandatory unicode alphanumeric string containing a unique name for the Port Object, from 1 to 128 characters without spaces. The string cannot include HTML tag. The check for duplicates is performed with a case insensitive search.
description	False	string	An optional unicode alphanumeric string containing a description of the Port Object, up to 200 characters. The string cannot include HTML tags. Field level constraints: length must be between 0 and 200 (inclusive). (Note: Additional constraints might exist)
isSystemDefined	False	boolean	A Boolean value, TRUE or FALSE (the default). The TRUE value indicates that this object is a system defined object
icmpv4Type	True	string	An enum value that specifies the ICMPv4 type. Field level constraints: cannot be null. (Note: Additional constraints might exist)
icmpv4Code	False	string	An enum value that specifies the ICMPv4 code.
type	True	string	A UTF8 string, all letters lower-case, that represents the class-type. This corresponds to the class name.

```
curl -X POST \
--header "Accept: application/json" \
--header "Authorization: Bearer ${ACCESS_TOKEN}" \
--header "Content-Type: application/json" \
-d '{
} \
https://${HOST}:${PORT}/api/fdm/v3/object/icmpv4ports
```

Refer to the exhibits which show the documentation associated with the create port object API call in Cisco Firepower Threat Defense, and a cURL command.

Which data payload completes the cURL command to run the API call?

- A. "icmpv4Type": "ANY",
"name": "string",
"type": "icmpv4portobject"
- B. "description": "This is an ICMP Echo",
"icmpv4Code": "8",
"icmpv4Type": "Echo",
"isSystemDefined": true,
"name": "ICMP Echo",
"version": "2.2"
- C. "description": "string",
"icmpv4Code": "ANY_IPV4",
"icmpv4Type": "ANY",
"id": "string",
"isSystemDefined": "string",
"name": "string",
"type": "icmpv4portobject",
"version": "string"
- D. "description": "string",
"icmpv4Code": "ANY_IPV4",
"icmpv4Type": null,
"isSystemDefined": true,
"name": "string",
"type": "icmpv4portobject"

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Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

Section: Mixed Questions

QUESTION 111

Which two types of organization are subject to GDPR? (Choose two.)

- A. only organizations that operate outside the EU
- B. any organization that offers goods or services to customers in the EU
- C. only organizations that have offices in countries that are part of the EU
- D. any organization that operates within the EU
- E. only organizations that physically reside in the EU

Correct Answer: BD

Section: (none)

Explanation

Explanation/Reference:

Section: Mixed Questions

Reference: <https://www.cisco.com/c/en/us/products/security/comply-with-GDPR.html>

QUESTION 112

FILL BLANK

A local Docker image has an image ID of 385001111. Fill in the blanks to complete the command in order to tag the image into the "cisco" repository with "version1.0"

\$ docker tag

A. 385001111 cisco/httpd:version1.0

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

Section: Mixed Questions

Reference: <https://docs.docker.com/engine/reference/commandline/tag/>

QUESTION 113

What is a benefit of continuous testing?

- A. increases the number of bugs found in production
- B. enables parallel testing
- C. removes the requirement for test environments
- D. decreases the frequency of code check-ins

Correct Answer: B

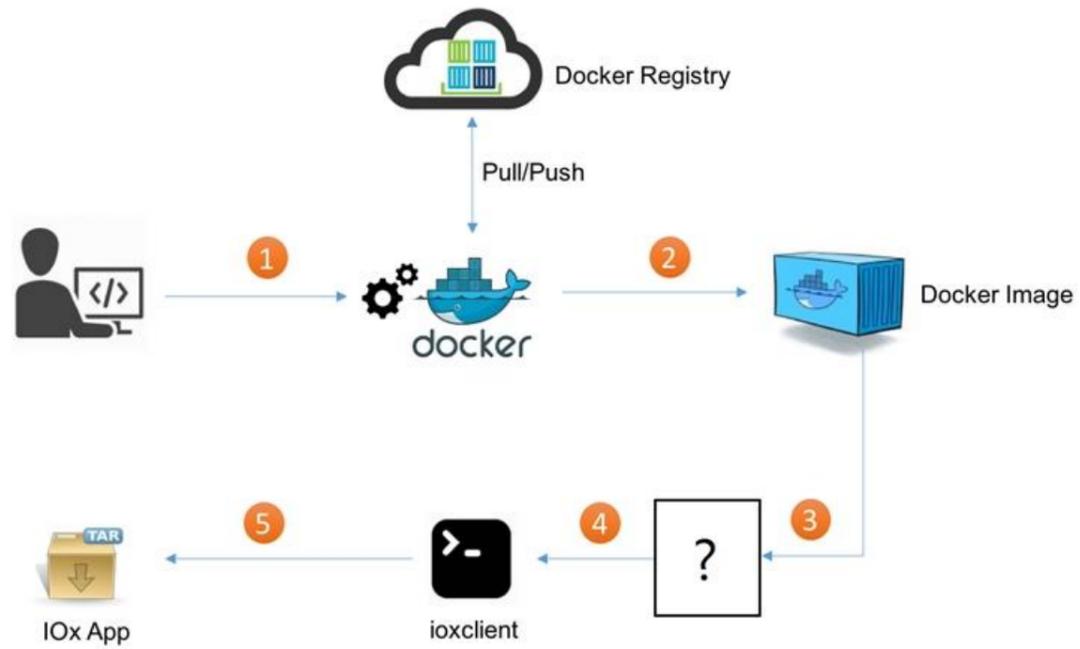
Section: (none)

Explanation

Explanation/Reference:

Section: Mixed Questions

QUESTION 114



Refer to the exhibit. What is the missing step in deploying a Docker container to IOx?

- A. Build the package.yaml file.
- B. Pull/push the image to the Docker registry.
- C. Build the package.cert file to sign the app.
- D. Log in to Device Manager.

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

Section: Mixed Questions

Reference: <https://www.cisco.com/c/en/us/support/docs/routers/1101-industrial-integrated-services-router/214383-build-and-deploy-a-docker-iox-package-fo.html>

QUESTION 115

```

Dockerfile
-----
# Use an official Python runtime as a parent image
FROM python:2.7-slim

# Set the working directory to /app
WORKDIR /app

# Copy the current directory contents into the container at /app
COPY . /app

# Install any needed packages specified in requirements.txt
RUN pip install --trusted-host pypi.python.org -r requirements.txt

# Make port 80 available to the world outside this container
EXPOSE 80

# Define environment variable
ENV NAME World

# Run app.py when the container launches
CMD ["python", "app.py"]
[EOF]

requirements.txt
-----
Flask
Redis
[EOF]

app.py
-----
from flask import Flask
from redis import Redis, RedisError
import os
import socket

# Connect to Redis
redis = Redis(host="redis", db=0, socket_connect_timeout=2, socket_timeout=2)

app = Flask(__name__)

@app.route("/")
def hello():
    try:
        visits = redis.incr("counter")
    except RedisError:
        visits = "<i>cannot connect to Redis, counter disabled</i>"

    html = "<h3>Hello {name}</h3>" \
          "<b>Hostname:</b> {hostname}<br/>" \
          "<b>Visits:</b> {visits}"
    return html.format(name=os.getenv("NAME", "world"),
                       hostname=socket.gethostname(), visits=visits)

if __name__ == "__main__":
    app.run(host='0.0.0.0', port=80)
[EOF]

```



Refer to the exhibit. The command **docker build --tag=friendlyhello .** is run to build a docker image from the given Dockerfile, requirements.txt, and app.py. Then the command **docker run -p 4000:80 friendlyhello** is executed to run the application.

Which URL is entered in the web browser to see the content served by the application?

- A. <http://127.0.0.1:80>
- B. <http://4000:80>
- C. <http://localhost:4000>
- D. <http://localhost:80>

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:
 Section: Mixed Questions

Reference: <http://rss2.com/feeds/XebiaLabs>

QUESTION 116

API CONSOLE

/api/fmc_config/v1/domain/e276abec-e0f2-11e3-8169-6d9ed49b625f/object/fqdns

005056BB-0B24-0ed3-0000-858993545263

Identifier for FQDN object.

+ query parameter

Content-Type Header

Accept Header

GET Success!

Response Text [Response Info](#) [Request Info](#)

```

"value": "10.156.100.26",
"overridable": false,
"description": "testServer",
"id": "005056811-0B24-0ed3-0000-858993545263",
"name": "testServer01.foobar.com",
"metadata": {
  "timestamp": 1551986986196,
  "lastUser": {
    "name": "jboga"
  },
  "domain ": {

```

VCEUp

Refer to the exhibit. Which API call does an engineer use to delete the FQDN object?

- A. DELETE /api/fmc_config/v1/domain/e276abec-e0f2-11e3-8169-6d9ed49b625f
- B. DELETE /api/fmc_config/v1/domain/e276abec-e0f2-11e3-8169-6d9ed49b625f/object/fqdns/005056BB-0B24-0ed3-0000-858993545263
- C. DELETE /api/fmc_config/v1/domain?id=e276abec-e0f2-11e3-8169-6d9ed49b625f
- D. DELETE /api/fmc_config/v1/domain/e276abec-e0f2-11e3-8169-6d9ed49b625f/object/fqdns?id=005056BB-0B24-0ed3-0000-858993545263

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
 Section: Mixed Questions

QUESTION 117

```

while attempts < max_attempts:
    response = requests.get(request_url,
        headers = { "Authorization": "Bearer " + api_token})

    # If not rate-limited, exit loop and continue with rest of the code
    if :
        break

    time.sleep((2 ** attempts) + random.random())
    attempts += 1

```

Refer to the exhibit. Which code snippet completes this code to handle API rate-limit?

- A. response.status_code == 429
- B. response.status_code != 408
- C. response.status != 408
- D. response.status_code != 429

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

Section: Mixed Questions

Reference: <https://developer.cisco.com/meraki/api/#!/rate-limit>

QUESTION 118

What is a consideration for using gRPC as the model-driven telemetry protocol on a Cisco IOS XE device?

- A. works in call-out mode
- B. XML-based transmission format
- C. works in dial-out mode
- D. human-readable transmission format

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

Section: Mixed Questions

QUESTION 119

Given an application that implements a basic search function as well as a video upload function, which two load-balancing approaches optimize the application's user experience? (Choose two.)

- A. Video upload requests should be routed to the endpoint using an intermediate hop.
- B. Search requests should be routed to the endpoint with lowest round-trip latency.
- C. Video upload requests should be routed to the endpoint with lowest round-trip latency.
- D. Video upload requests should be routed to the endpoint with highest data throughput.
- E. Search requests should be routed to the endpoint with highest data throughput.

Correct Answer: CE

Section: (none)

Explanation

Explanation/Reference:

Section: Mixed Questions

QUESTION 120

What is a characteristic of a monolithic architecture?

- A. It is an application with multiple independent parts.
- B. New capabilities are deployed by restarting a component of the application.
- C. A service failure can bring down the whole application.
- D. The components are platform-agnostic.

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

Section: Mixed Questions

Reference: <https://medium.com/koderlabs/introduction-to-monolithic-architecture-and-microservices-architecture-b211a5955c63>

QUESTION 121

```

---
- name: IOS XE Configuration
  hosts: ios_xe
  connection: local
  gather_facts: false

  tasks:
  - name: IOS NTP
    ios_ntp:
      provider: "{{ creds }}"
      server: 10.0.255.10
      source_int: GigabitEthernet2
      logging: false

```

VCEUp

Refer to the exhibit. Which key value pair from the ios_ntp Ansible module creates the NTP server peer?

- A. state: absent
- B. state: False
- C. config: absent
- D. config: False

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

Section: Mixed Questions

QUESTION 122

In the three-legged OAuth2 authorization workflow, which entity grants access to a protected resource?

- A. resource owner
- B. client
- C. resource server
- D. authorization server

Correct Answer: D

Section: (none)

Explanation**Explanation/Reference:**

Section: Mixed Questions

Reference: https://developer.orange.com/tech_guide/3-legged-oauth/

QUESTION 123

An engineer must enable an SSID in a Meraki network.
Which request accomplishes this task?

- A. PUT /networks/{networkId}/ssids/{number}?enabled=true
- B. POST /networks/{networkId}/ssids/{number}?enabled=true
- C. PUT /networks/{networkId}/ssids/{number} {"enable": true}
- D. POST /networks/{networkId}/ssids/{number} {"enable": true}

Correct Answer: A

Section: (none)

Explanation**Explanation/Reference:**

Section: Mixed Questions

QUESTION 124

DRAG DROP

```

rackunit_json_body = {
    "request_method": "item 1",
    "request_path": ('https://www.intersight.com/api/vi/' +
                    'compute/RackUnits?$select= item 2 ')
}

firmware_json_body = {
    "request_method": "item 3",
    "resource_path": "https://www.intersight.com/api/vi/firmware/item 4",
    "request_body": {
        "DirectDownload": {},
        "Networkshare": {
            "Mimetype": "www",
            "item 5": "nw_upgrade_full",
            "HttpServer": {
                "LocationLink": "http://10.10.10.10/ucs-c240m4-huu-4.0.2h.iso",
            }
        },
        "UpgradeType": "item 6",
        "Server": ""
    }
}

RESPONSE = requests.request(method=rackunit_json_body['request_method'],
                             url=BURL+rackunit_json_body['resource_path'], auth=AUTH)

firmware_json_body['request_body']['Server'] = (
    json.loads(RESPONSE.text)['Results'][0]['item 7'])
RESPONSE = requests.request(method=firmware_json_body['request_method'],
                             url=BURL+firmware_json_body['resource_path'],
                             data=json.dumps(firmware_json_body['request_body']), auth=AUTH)

```

VCEUp

Request Model

- DirectDownload: [1] *Complex Object*
 - Object: {0}
- NetworkShare: [1] *Complex Object*
 - Object: {0}
- UpgradeType: **string** *Desired upgrade made to choose either direct download based upgrade or network share upgrade.*
enum:[direct_upgrade,network_upgrade]
- Device: [1] *MoRef to [assetDeviceRegistration](#)*
 - Object: {3}
 - ObjectType: **string** *(Read Only) The Object Type of the referenced REST resource.*
 - Moid: **string** *(Read Only) The Moid of the referenced REST resource.*
 - Selector: **string** *(Read Only) An OData \$filter expression which describes the REST resource to be referenced. This field may be set instead of 'moid' by clients. If 'moid' is set this field is ignored. If 'selector' is set and 'moid' is empty/absent from the request. Intersight will determine the Moid of the resource matching the filter expression and populate it in the MoRef that is part of the object instance being inserted/updated to fulfill the REST request. An error is returned if the filter matches zero or more than one REST resource.
An example filter string is: Serial eq '3AA8B7T11'.*

Refer to the exhibit above and click on the resource tabs in the top left corner to view resources to help with this question. The script uses the Cisco Intersight REST API. Drag and drop the code from the left onto the item numbers on the right to match the missing sections in the Python script to update the firmware on a specific Cisco Intersight managed UCS rack server, DMZ-R-L3-ADJM. Not all code snippets are used.

Select and Place:

Answer Area

PUT	item 1
POST	item 2
GET	item 3
Upgradeoption	item 4
Upgrades	item 5
Moid,Model,AssetTag&'+'\$filter=Model ne \DMZ-R-L3-ADJM\	item 6
Moid,Model,AssetTag&'+'\$filter=AssetTag eq \DMZ-R-L3-ADJM\	item 7
Moid	
ObjectType	
network_upgrade	

Correct Answer:

Answer Area

	GET
POST	Moid,Model,AssetTag&'+'\$filter=AssetTag eq \DMZ-R-L3-ADJM\
	PUT
	ObjectType
Upgrades	network_upgrade
Moid,Model,AssetTag&'+'\$filter=Model ne \DMZ-R-L3-ADJM\	Upgradeoption
	Moid

VCEUp

Section: (none)
Explanation

Explanation/Reference:

QUESTION 125
DRAG DROP

```
curl --location --request PUT 'https://ios-xe-
mgmt.cisco.com:9443/restconf/data/ [item 1] / [item 2] =GigabitEthernet2' \
--header 'Authorization: [item 3] ' \
--header 'Accept: [item 4] ' \
--header 'Content-Type: application/yang-data+json' \
--data-raw '{
  "ietf-interfaces:interface": {
    " [item 5] ": "GigabitEthernet2",
    "description": "Configured by RESTCONF",
    " [item 6] ": "iana-if-type:ethernetCsmacd",
    "enabled": true
    " [item 7] ": {
      "address": [
        {
          " [item 8] ": "10.255.255.1",
          " [item 9] ": "255.255.255.0"
        }
      ]
    }
  }
}'
```

Refer to the exhibit above and click on the resource tabs in the top left corner to view resources to help with this question. Drag and drop the code snippets from the left onto the item numbers on the right that match the missing sections in the exhibit to complete the cURL script that will use RESTCONF to update an interface on a Cisco IOS XE device.

Select and Place:

Answer Area

interface	item 1
ietf-interfaces:interfaces	item 2
Basic cm9vdDpjaXNjbzEyMw==	item 3
name	item 4
type	item 5
application/yang-data+json	item 6
ietf-ip:ipv4	item 7
ip	item 8
netmask	item 9

Correct Answer:

Answer Area

	name
	interface
	ietf-interfaces:interfaces
	type
	Basic cm9vdDpjaXNjbzEyMw==
	ip
	netmask
	application/yang-data+json
	ietf-ip:ipv4

VCEUp

Section: (none)
Explanation

Explanation/Reference:

QUESTION 126
 DRAG DROP

Drag and drop the steps from the left into the order on the right to configure and install a container on a Cisco Catalyst 9000 Series Switch.

Select and Place:

Answer Area

cat9k(config)# iox	step 1
cat9k# app-hosting install appid MYAPP package flash:myapp.tar	step 2
cat9k# app-hosting start appid MYAPP	step 3
cat9k# app-hosting activate appid MYAPP	step 4

Correct Answer:

Answer Area

	cat9k# app-hosting start appid MYAPP
	cat9k# app-hosting activate appid MYAPP
	cat9k(config)# iox
	cat9k# app-hosting install appid MYAPP package flash:myapp.tar

Section: (none)
Explanation

Explanation/Reference:

QUESTION 127
DRAG DROP

Drag and drop the code from the bottom onto the box where the code is missing on the Ansible task to enable a VLAN on a Meraki MX device. Not all options are used.

Select and Place:

Answer Area

```

- name: Create combined network
  meraki_network:
    auth_key: "{{ meraki_api_key }}"
    net_name: "{{ item }}"
    org_id: "{{ meraki_org_id }}"
    type:
      -switch
      -wireless
      -appliance
    timezone: Europe/London
    tags: staging, uk
    loop: "{{ network_ids }}"
    delegate_to: localhost
    register: result

- name: Enable VLAN support on MX
  uri:
    url: "https://api.meraki.com/api/v0/networks/{{ item.data.id }}/vlansEnabledState"
    return_content: yes
    headers:
      X-Cisco-Meraki-API-Key: "{{ meraki_api_key }}"
    body:
      enabled: true
      follow_redirects: all
      status_code: 200
      body_format: json
    delegate_to: localhost

```

loop: "{{ result.results }}" method: PUT

when: "{{ result.results }}" method: PATCH

body: application/json

Correct Answer:

Answer Area

```

- name: Create combined network
  meraki_network:
    auth_key: "{{ meraki_api_key }}"
    net_name: "{{ item }}"
    org_id: "{{ meraki_org_id }}"
    type:
      -switch
      -wireless
      -appliance
    timezone: Europe/London
    tags: staging, uk
    loop: "{{ network_ids }}"
    delegate_to: localhost
    register: result

- name: Enable VLAN support on MX
  uri:
    url: "https://api.meraki.com/api/v0/networks/{{ item.data.id }}/vlansEnabledState"
    return_content: yes
    headers:
      X-Cisco-Meraki-API-Key: "{{ meraki_api_key }}"
    body:
      enabled: true
      follow_redirects: all
      status_code: 200
      body_format: json
      body: application/json
    delegate_to: localhost
    method: PATCH

```

```
loop: "{{ result.results }}" method: PUT
```

```
when: "{{ result.results }}"
```

Section: (none)

Explanation

Explanation/Reference:

QUESTION 128

DRAG DROP

```

"""Create UCS Server Pool and associate to template """
from ucsm.sdk.ucshandle import UcsHandle
from ucsm.sdk.mometa.compute.ComputePool import ComputePool
from ucsm.sdk.mometa.compute.ComputePooledSlot import ComputePooledSlot
from ucsm.sdk.mometa.ls.LsRequirement import LsRequirement

HANDLE = [item 1] ("sandbox-ucsml.cisco.com",
                  "admin",
                  "password")

HANDLE.login()
SERVER_POOL = [item 2] (parent_mo_or_dn="org-root/org-devnet",
                       name="devcore_pool")
HANDLE. [item 3] (SERVER_POOL, modify_present=True)
for blade in HANDLE.query_classid(
    "computeBlade",
    filter_str='(chassis_id, "7")'
):
    SERVER = [item 4] (
        parent_mo_or_dn=SERVER_POOL,
        chassis_id=blade.chassis_id,
        slot_id=blade.slot_id
    )
    HANDLE.add_mo(SERVER, modify_present=True)
HANDLE.commit()
SP_TEMPLATE = [item 5] (parent_mo_or_dn="org-root/org-devnet/ls-devcore_template",
                       name="devcore_pool")
HANDLE.add_mo(SP_TEMPLATE, modify_present=True)
HANDLE. [item 6] ()
HANDLE. [item 7] ()

```



Refer to the exhibit above and click on the resource tabs in the top left corner to view resources to help with this question. Python code using the UCS Python SDK is creating a server pool named "devcore_pool" and populating the pool with all servers from chassis 7, and then the server pool is associated to existing Service Profile template "devcore_template". Drag and drop the code from the left onto the item numbers on the right that match the missing sections in the Python exhibit.

Select and Place:

Answer Area

add_mo	<item 1>
ComputePooledSlot	<item 2>
ComputePool	<item 3>
UcsHandle	<item 4>
commit	<item 5>
LsRequirement	<item 6>
logout	<item 7>

Correct Answer:

Answer Area

	ComputePool
	add_mo
	ComputePooledSlot
	IsRequirement
	UcsHandle
	commit
	logout

Section: (none)
Explanation

Explanation/Reference:

QUESTION 129
DRAG DROP

```

import requests, json, sys
token = ""
def get_dnac_devices():
    <item 1>:
        url = "https://sandboxdnac.cisco.com/dna/intent/api/v1/network-device"
        payload = {}
        headers = { 'Content-Type': 'application/json',
                    'Accept': 'application/json', 'x-auth-token': token }
        response = requests.request("GET", url, headers=headers, data = payload)
        response.raise_for_status()
        return response.text
    <item 2>:
        if str(<item 3>) in str(e):
            create_dnac_token()
def create_dnac_token():
    try:
        url = "https://sandboxdnac2.cisco.com/dna/system/api/v1/auth/token"
        payload = {}
        headers = { <item 4>: 'Basic ZGV2bmV0dXNlcjpaXNjbzEyMyE=',
                    'Content-Type': 'application/json' }
        response = requests.request("POST", url, headers=headers, data = payload)
        response.raise_for_status()
        return response.json()["Token"]
    except Exception as e:
        if str(<item 5>) in str(e):
            sys.exit("DNAC Service is not reachable")

if __name__ == "__main__":
    token = create_dnac_token()
    print(get_dnac_devices())

```



Refer to the exhibit. Drag and drop the code snippets from the left onto the item numbers on the right that match the missing sections in the exhibit to complete the script to implement control flow.

Select and Place:

Answer Area

request.status_codes.codes.UNAUTHORIZED	item 1
request.status_codes.codes.TOO_MANY_REQUESTS	item 2
request.status_codes.codes.SERVER_ERROR	item 3
Authorization	item 4
try	item 5
except Exception as e	item 6

Correct Answer:

Answer Area

	try
	except Exception as e
	request.status_codes.codes.SERVER_ERROR
	Authorization
	request.status_codes.codes.UNAUTHORIZED
	request.status_codes.codes.TOO_MANY_REQUESTS

Section: (none)
Explanation

Explanation/Reference:

QUESTION 130
DRAG DROP

Drag and drop the application requirement on the left onto the database type that should be selected for the requirement on the right.

Select and Place:

Application requirements

- rapid transaction handling
- highly horizontally scalable
- enforced data integrity tools
- elastic, scalable, schema free
- structured query language
- highly normalized data

Answer Area
Database type

Relational
Nonrelational

Correct Answer:

Application requirements

Answer Area
Database type

Relational
structured query language
highly horizontally scalable
elastic, scalable, schema free
Nonrelational
rapid transaction handling
enforced data integrity tools
highly normalized data

Section: (none)
Explanation

Explanation/Reference:

QUESTION 131
DRAG DROP

Drag and drop the steps on the left into the order on the right for an end-user to access an OAuth2 protected resource using the 'Authorization Code Grant' flow.

Select and Place:

Answer Area

end-user initiates authentication OAuth client	step 1
OAuth client requests access token from authorization server	step 2
OAuth client requests a resource on the resource server	step 3
OAuth client receives access token from authorization server	step 4
OAuth client receives an authorization code	step 5
OAuth client communicates with authorization server to display login UI	step 6
end-user authenticates with the authorization server	step 7

Correct Answer:

Answer Area

	OAuth client requests a resource on the resource server
	OAuth client receives access token from authorization server
	end-user initiates authentication OAuth client
	OAuth client requests access token from authorization server
	OAuth client communicates with authorization server to display login UI
	end-user authenticates with the authorization server
	OAuth client receives an authorization code

Section: (none)
Explanation

Explanation/Reference:

QUESTION 132

DRAG DROP

Drag and drop the code from the bottom onto the box where the code is missing in the snippet to complete this Ansible playbook. Not all options are used.

Select and Place:

```

---
- hosts: ios
  gather_facts: no
  vars:

    dns_servers:
      -ip name-server [ ]
      -ip name-server 208.67.220.220

  tasks:

- name: set name-server commands
  with_items: "{{ [ ] }}"
  ios_config:
    lines:
      -"{{ item }}"
  register: set_dns

```

name-server	208.67.222.222
dns_servers	dns-address

Correct Answer:

```

---
- hosts: ios
  gather_facts: no
  vars:

    dns_servers:
      -ip name-server dns-address
      -ip name-server 208.67.220.220

  tasks:

- name: set name-server commands
  with_items: "{{ [208.67.222.222] }}"
  ios_config:
    lines:
      -"{{ item }}"
  register: set_dns

```

name-server	
dns_servers	

Section: (none)

Explanation**Explanation/Reference:****QUESTION 133**

A developer deploys a SQLite database in a Docker container. Single-use secret keys are generated each time a user accesses the database. The keys expire after 24 hours. Where should the keys be stored?

- A. Outside of the Docker container in the source code of applications that connect to the SQLite database.
- B. In a separate file inside the Docker container that runs the SQLite database.
- C. In an encrypted database table within the SQLite database.
- D. In a separate storage volume within the Docker container.

Correct Answer: D

Section: (none)

Explanation**Explanation/Reference:**

Section: Mixed Questions

QUESTION 134

While working with the Webex Teams API, on an application that uses end-to-end encryption, a webhook has been received. What must be considered to read the message?

- A. Webhook information cannot be used to read the message because of end-to-end encryption. The API key is needed to decrypt the message.
- B. Webhook returns the full unencrypted message. Only the body is needed to query the API.
- C. Webhook returns a hashed version of the message that must be unhashed with the API key.
- D. Webhook returns message identification. To query, the API is needed for that message to get the decrypted information.

Correct Answer: A

Section: (none)

Explanation**Explanation/Reference:**

Section: Mixed Questions

QUESTION 135

Which Puppet manifest needs to be used to configure an interface GigabitEthernet 0/1 on a Cisco IOS switch?

A.

```
ios_interface {
  name           => 'GigabitEthernet0/1',
  link_status    => false,
  logging_event  => [
    'spanning-tree',
    'subif-link-status'
  ],
  logging_event_link_status => false,
  ip_dhcp_snooping_trust   => true,
  ip_dhcp_snooping_limit  => 1500,
}
```

B.

```
ios_interface {
  'GigabitEthernet0/1' => {
    link_status    => false,
    logging_event  => [
      'spanning-tree',
      'subif-link-status'
    ],
    logging_event_link_staus => false,
    ip_dhcp_snooping_trust   => true,
    ip_dhcp_snooping_limit  => 1500,
  }
}
```

C.

```
ios_interface {
  id           => 'GigabitEthernet0/1',
  link_status  => false,
  logging_event => [
    'spanning-tree',
    'subif-link-status'
  ],
  logging_event_link_status => false,
  ip_dhcp_snooping_trust   => true,
  ip_dhcp_snooping_limit   => 1500,
}
```

D.

```
ios_interface { 'GigabitEthernet0/1':
  link_status  => false,
  logging_event => [
    'spanning-tree',
    'subif-link-status'
  ],
  logging_event_link_status => false,
  ip_dhcp_snooping_trust   => true,
  ip_dhcp_snooping_limit   => 1500,
}
```

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

Section: Mixed Questions

QUESTION 136

An automated solution is needed to configure VMs in numerous cloud provider environments to connect the environments to an SDWAN. The SDWAN edge VM is provided as an image in each of the relevant clouds and can be given an identity and all required configuration via cloud-init without needing to log into the VM once online.

Which configuration management and/or automation tooling is needed for this solution?

- A. Ansible
- B. Intersight
- C. HyperFlex
- D. Terraform

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

Section: Mixed Questions

QUESTION 137

A developer needs to configure an environment to orchestrate and configure. Which two tools should be used for each task? (Choose two.)

- A. Jenkins for orchestration
- B. Terraform for orchestration
- C. Bamboo for configuration
- D. Kubernetes for orchestration
- E. Ansible for configuration

Correct Answer: BE

Section: (none)

Explanation

Explanation/Reference:

Section: Mixed Questions

QUESTION 138

What are two steps in the OAuth2 protocol flow? (Choose two.)

- A. The user is authenticated by the authorization server and granted an access token.
- B. The user's original credentials are validated by the resource server and authorization is granted.
- C. The user indirectly requests authorization through the authorization server.
- D. The user requests an access token by authentication and authorization grant presentation.
- E. The user requests the protected resource from the resource server using the original credentials.

Correct Answer: AE

Section: (none)

Explanation

Explanation/Reference:

Section: Mixed Questions

Reference: <https://www.digitalocean.com/community/tutorials/an-introduction-to-oauth-2>

QUESTION 139

Refer to the exhibit. A developer must create a new network object named testnetwork by using the Cisco Firepower Device Management API. The script must also handle any exceptions that occur during the request and print out any resulting errors. Which script must be used?

POST /object/networks

Implementation Notes
This API call is not allowed on the standby unit in an HA pair.

Response Class (Status 200)

Model	Example Value
	<pre>{ "version": "string", "name": "string", "description": "string", "subType": "HOST", "value": "string" "links": { "self": "string" } }</pre>

VCEUp

A.

```
import requests, json
headers = { 'Content-type': 'application/json' }
data = {"name": "testnetwork",
        "description": "Test Network", "subType" : "HOST",
        "value": "192.168.1.1", "type" : "networkobject"}
try:
    response = requests.post(
        'https://firepower-server/object/networks',
        data=data)
except:
    print(error)
```

B.

```
import requests, json
headers = { 'Content-type': 'application/json' }
data = {"name": "testnetwork",
        "description": "Test Network", "subType" : "HOST",
        "value": "192.168.1.1", "type" : "networkobject"}
try:
    response = requests.post(
        'https://firepower-server/object/networks',
        data=data, headers=headers)
    response.raise_for_status()
except:
    print(error)
```

C.

```
import requests, json
headers = { 'Content-type': 'application/json' }
data = {"name": "testnetwork",
"description": "Test Network", "subType" : "HOST",
"value": "192.168.1.1", "type" : "networkobject"}
try:
    response = requests.post(
        'http://firepower-server/object/networks',
        data=json.dumps(headers), headers=data)
    response.raise_for_status()
except:
    print(error)
```

D.

```
import requests, json
headers = { 'Content-type': 'application/json' }
data = {"name": "testnetwork",
"description": "Test Network", "subType" : "HOST",
"value": "192.168.1.1", "type" : "networkobject"}
try:
    response = requests.post(
        'https://firepower-server/object/networks',
        data=json.dumps(data), headers=headers)
    response.raise_for_status()
except:
    print(error)
```

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

Section: Mixed Questions

QUESTION 140

What is the gRPC Network Management Interface protocol?

- A. a unified management protocol for streaming telemetry and database logging
- B. a configuration management protocol for monitoring
- C. a protocol for configuration management and streaming telemetry
- D. a logging protocol used across database servers

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

Section: Mixed Questions

Reference: <https://infohub.delltechnologies.com//enterprise-sonic-distribution-by-dell-technologies-lifecycle-management/grpc-network-management-interface>

QUESTION 141

An application has been developed for monitoring rooms in Cisco Webex. An engineer uses the application to retrieve all the messages from a Cisco Webex room, but the results are slowly presented. Which action optimizes calls to retrieve the messages from the /v1/messages endpoint?

- A. Define the ma property by using the pagination functionality.
- B. Set the beforeMessage property to retrieve the messages sent before a specific message ID.
- C. Avoid unnecessary calls by using a prior request to /v1/rooms to retrieve the last activity property.
- D. Filter the response results by specifying the created property in the request.

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

Section: Mixed Questions

Reference: <https://apphub.webex.com/messaging/applications/paginate-cisco-systems-82277>

QUESTION 142

What are two principles according to the build, release, run principle of the twelve-factor app methodology? (Choose two.)

- A. Code changes are able to be made at runtime.
- B. Separation between the build, release, and run phases.
- C. Releases should have a unique identifier.
- D. Existing releases are able to be mutated after creation.
- E. Release stage is responsible for compilation of assets and binaries.

Correct Answer: BC

Section: (none)

Explanation

Explanation/Reference:

Section: Mixed Questions

Reference: <https://www.bmc.com/blogs/twelve-factor-app/>

QUESTION 143

A developer is building an application to access a website. When running the application, an HTTP 403 error code has been received. How should the application be modified to handle this code?

- A. Create a loop on cancel the operation and run a new one after the code is received.
- B. Use exponential backoff when retrying distributed services and other remote endpoints.
- C. Build a try/except around the urlopen to find errors occurring in the request.
- D. Redirect the request to an internal web server and make a new request from the internal resource.

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

Section: Mixed Questions

QUESTION 144

When end-to-end encryption is implemented, which area is most vulnerable to exploitation?

- A. cryptographic key exchange
- B. endpoint security
- C. cryptographic key generation
- D. security of data in transit

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

Section: Mixed Questions

QUESTION 145

Refer to the exhibit. The presented application consists of a Nginx container and a load balancer service. Which GitLab CI/CD configuration implements the Kubernetes deployment?

```
#k8s-nginx.yml
---
apiVersion: apps/v1
kind: Deployment
metadata:
  name: nginx-deployment
  labels:
    app: nginx
spec:
  replicas: 1
  selector:
    matchLabels:
      app: nginx
  template:
    metadata:
      labels:
        app: nginx
    spec:
      containers:
      - name: nginx
        image: nginx
        ports:
        - name: nginx-port
          containerPort: 80
---
apiVersion: v1
kind: Service
metadata:
  name: load-balancer
spec:
  selector:
    app: nginx
  ports:
  - port: 80
    targetPort: nginx-port
  type: LoadBalancer
```

- A.

```
Deploy:
stage: Deployment
script:
- kubectl exec -k k8s-nginx.yml
```
- B.

```
Deploy:
stage: Deployment
script:
- kubectl apply -f k8s-nginx.yml
```
- C.

```
Deploy:
stage: Deployment
script:
- kubectl apply -k k8s-nginx.yml /patch/to/cluster
```
- D.

```
Deploy:
stage: Deployment
script:
- kubectl exec -f k8s-nginx.yml /patch/to/cluster
```

VCEUp

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:
 Section: Mixed Questions

QUESTION 146

What are two benefits of using distributed log collectors? (Choose two.)

- A. supports multiple transport protocols such as TCP/UDP
- B. improves performance and reduces resource consumption
- C. provides flexibility due to a wide range of plugins and accepted log formats
- D. enables extension of logs with fields and export to backend systems

E. buffers and resends data when the network is unavailable

Correct Answer: BE

Section: (none)

Explanation

Explanation/Reference:

Section: Mixed Questions

QUESTION 147

What are two features of On-Box Python for hosting an application on a network device? (Choose two.)

- A. It has direct access to Cisco IOS XE CLI commands.
- B. It is a Python interpreter installed inside the guest shell.
- C. It enables execution of XML scripts on a Cisco IOS XE router or switch.
- D. It supports Qt for graphical interfaces and dashboards.
- E. It has access to Cisco IOS XE web UI through a controller.

Correct Answer: AB

Section: (none)

Explanation

Explanation/Reference:

Section: Mixed Questions

Reference: https://blog.wimwauters.com/networkprogrammability/2020-06-08_guestshell_onbox/

QUESTION 148

Refer to the exhibit. An engineer is configuring Ansible to run playbooks against Cisco IOS XE Software. What should be configured in ansible.cfg as the connection type?

```
[all:vars]
ansible_connection=
ansible_user=admin
ansible_network_os=ios
```

- A. network_cli
- B. ssh
- C. shell
- D. command

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

Section: Mixed Questions

Reference: https://docs.ansible.com/ansible/latest/user_guide/intro_inventory.html

QUESTION 149

A local Docker container with a Container ID of 391441516e7a is running a Python application. Which command is used to connect to a bash shell in the running container?

- A. `docker attach <Container ID>`
- B. `docker exec -it <Container ID> /bin/bash`
- C. `docker run -a stdin -a stdout <Container ID> /bin/bash`
- D. `docker container attach <Container ID>`

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

Section: Mixed Questions

QUESTION 150

Refer to the exhibit. The JSON response is received from the Meraki location API. Which parameter is missing?

```
{
  "version": "3.0",
  "secret": "supersecret",
  "type": "WiFi",
  "data": {
    "networkId": "L 00000000000391274",
    "observations": [
      {
        "locations": [],
        "ipv4": null,
        "ssid": null,
        "os": null,
        "mac": "cc:cc:66:58:85:23",
        "latestRecord": [
          {
            "time": "2020-10-19T10:23:21z",
            "nearestApMac": "aa:aa:22:56:2e:42",
            "nearestApRssi": "-62"
          }
        ]
      }
    ]
  }
}
```

- A. apMac
- B. clientMac
- C. clientId
- D. accesspoint

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

Section: Mixed Questions

Reference: <https://community.meraki.com/t5/Developers-APIs/Location-lat-lng-and-x-y-are-showing-similar-for-all-devices/td-p/65707>

QUESTION 151

Refer to the exhibit. This cURL POST request creates an OAuth access token for authentication with FDM API requests. What is the purpose of the file "@token_data" that cURL is handling?

```
curl --insecure -H "Accept: application/json" \
-H "Content-Type:application/json" \
-d @token_data \
https://ast0072-pod.cisco.com:33333//api/fdm/latest/fdm/token
```

- A. This file is given as input to store the access token received from FDM.
- B. This file is used to send authentication-related headers.
- C. This file contains raw data that is needed for token authentication.
- D. This file is a container to log possible error responses in the request.

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

Section: Mixed Questions

QUESTION 152

Which two gRPC modes of model-driven telemetry are supported on Cisco IOS XE Software? (Choose two.)

- A. dial-in
- B. dial-out
- C. call-in
- D. call-out
- E. passive

Correct Answer: AB

Section: (none)

Explanation

Explanation/Reference:

Section: Mixed Questions

Reference: https://www.cisco.com/c/en/us/td/docs/ios-xml/ios/prog/configuration/1612/b_1612_programmability_cg/model_driven_telemetry.html#id_86392

QUESTION 153

Refer to the exhibit. Which parameter is missing from the JSON response to confirm the API version that is used?

```

1 {
2   "version": "2",
3   "secret": "supersecret",
4   "type": "DevicesSeen",
5   "data": {
6     "apMac": "00:18:0a:13:dd:b0",
7     "apFloors": [],
8     "apTags": [
9       "dev",
10      "home",
11      "test"
12    ]
13  }
14 }
```

- A. version 4
- B. v 10
- C. 2
- D. version 2

VCEUp

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

Section: Mixed Questions

QUESTION 154

What is a capability of the End User Monitoring feature of the AppDynamics platform?

- A. discovers traffic flows, nodes, and transport connections where network or application/network issues are developing
- B. monitoring local processes, services, and resource use, to explain problematic server performance
- C. identifies the slowest mobile and IoT network requests, to locate the cause of problems
- D. provides metrics on the performance of the database to troubleshoot performance-related issues

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

Section: Mixed Questions

Reference: <https://docs.appdynamics.com/display/PRO21/Overview+of+End+User+Monitoring>

QUESTION 155

A heterogeneous network of vendors and device types needs automating for better efficiency and to enable future automated testing. The network consists of switches, routers, firewalls and load balancers from different vendors, however they all support the NETCONF/RESTCONF configuration standards and the YAML models with every feature the business requires. The business is looking for a buy versus build solution because they cannot dedicate engineering

resources, and they need configuration diff and rollback functionality from day 1.
Which configuration management for automation tooling is needed for this solution?

- A. PyATS
- B. AppDynamics
- C. NSO
- D. Puppet

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

Section: Mixed Questions

QUESTION 156

Refer to the exhibit. Which command resolves the merge conflict by removing the previous commit from the commit history?

```
$ git checkout release-2.1
Switched to branch 'release-2.1'
Your branch is up to date with 'origin/release-2.1'.

$ git add -A
$ git commit -m "Demo"
[release-2.1 6226cf6] Demo
1 file changed, 3 insertions(+)
$ git merge dev
Auto-merging python/mac.py
CONFLICT (content): Merge conflict in python/mac.py
Automatic merge failed; fix conflicts and then commit the result.
```

- A. `git checkout mac.py`
- B. `git reset --hard HEAD~1`
- C. `git rebase --abort`
- D. `git revert -m 1 HEAD`

VCEUp

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

Section: Mixed Questions

QUESTION 157

What is the function of dependency management?

- A. separating code into modules that execute independently
- B. utilizing a single programming language/framework for each code project
- C. automating the identification and resolution of code dependencies
- D. managing and enforcing unique software version names or numbers

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

Section: Mixed Questions

QUESTION 158

Refer to the exhibits. An interface named "GigabitEthernet2" has been configured on a Cisco IOS XE device. Using RESTCONF APIs as defined by the ietf-interfaces@2014-05-08.yang model, which two combinations of "rest_operation"

and "payload" must be added to the Python script to set the "description" to "Configured by RESTCONF"? (Choose two.)

```

module: ietf-interfaces
+--rw interfaces
| +--rw interface* [name]
| | +--rw name                string
| | +rw description?          string
| | +--rw type                identityref
| | +--rw enabled?            boolean
| | +--rw link-up-down-trap-enable? enumeration {if-mib}?
+--ro interfaces-state
+--ro interface* [name]
  +--ro name                string
  +--ro type                identityref
  +--ro admin-status        enumeration {if-mib}?
  +--ro oper-status        enumeration
  +--ro last-change?       yang:date-and-time
  +--ro if-index           int32 {if-mib}?
  +--ro phys-address?     yang:phys-address
  +--ro higher-layer-if*   interface-state-ref
  +--ro lower-layer-if*   interface-state-ref
  +--ro speed?            yang:gauge64
  +--ro statistics
    +--ro discontinuity-time yang:date-and-time
    +--ro in-octets?         yang:counter64
    +--ro in-unicast-pkts?   yang:counter64
    +--ro in-broadcast-pkts? yang:counter64
    +--ro in-multicast-pkts? yang:counter64
    +--ro in-discards?      yang:counter32
    +--ro in-errors?        yang:counter32
    +--ro in-unknown-protos? yang:counter32
    +--ro out-octets?       yang:counter64
    +--ro out-unicast-pkts? yang:counter64
    +--ro out-broadcast-pkts? yang:counter64
    +--ro out-multicast-pltas? yang:counter64
    +--ro out-discards?    yang:counter32
    +--ro out-errors?      yang:counter32

```

```

import requests
url = ("https://ios-xe-mgmt.cisco.com:9443/restconf/data/ietf-interfaces:" +
      "interfaces/interface=GigabitEthernet2")

headers = {
    'Accept': "application/yang-data+json",
    'Authorization': "Basic cm9vdDpEXlZheSFfMTAm",
    'Content-Type': "application"
}

response = requests.request(rest_operation, url, data=payload,
                             headers = headers, verify=False)

print (response.text)

```

VCEUp

A.

```

rest_operation = "PATCH"

payload = " {\n  \n  \"ietf-interfaces:interface\": {\n    \n    \"name\": \"GigabitEthernet2\", \n    \n    \"description\": \"Configured by RESTCONF\" \n  }\n}"

```

B.

```

rest_operation = "PUT"

payload = " {\n  \n  \"ietf-interfaces:interface\": {\n    \n    \"name\": \"GigabitEthernet2\", \n    \n    \"description\": \"Configured by RESTCONF\" \n  }\n}"

```



```

from ucsm sdk.ucseventhandler import UcsEventHandle
from ucsm sdk.mometa.ls.LsServer import [ ]

end_script = False

def _sp_associate_callback(mce):
    global end_script
    if mce.mo.assoc_state == LsServerConsts.ASSOC_STATE_ASSOCIATED:
        log.debug("SP:" + mce.mo.dn + " Assoc Successful. assoc_state: "+
            mce.mo.assoc_state)
    elif mce.mo.assoc_state == LsServerConsts.ASSIGN_STATE_FAILED:
        log.error("SP:" + mce.mo.dn + "Assoc Failed. assoc_state: "+
            mce.mo.assoc_state)
    end_script = True

def _sp_associate_monitor(event_handle, mo):
    [ ].add(managed_object=mo, prop= "assoc_state",
        success_value=[LsServerConsts.ASSOC_STATE_ASSOCIATED],
        failure_value=[LsServerConsts.ASSOC_ [ ],
            timeout_sec=600, call_back=_sp_associate_callback)

[ STATE_ERROR] [ STATE_FAILED]
[ LsServerConsts] [ event_handle]

```

Correct Answer:

```

from ucsm sdk.ucseventhandler import UcsEventHandle
from ucsm sdk.mometa.ls.LsServer import LsServerConsts

end_script = False

def _sp_associate_callback(mce):
    global end_script
    if mce.mo.assoc_state == LsServerConsts.ASSOC_STATE_ASSOCIATED:
        log.debug("SP:" + mce.mo.dn + " Assoc Successful. assoc_state: "+
            mce.mo.assoc_state)
    elif mce.mo.assoc_state == LsServerConsts.ASSIGN_STATE_FAILED:
        log.error("SP:" + mce.mo.dn + "Assoc Failed. assoc_state: "+
            mce.mo.assoc_state)
    end_script = True

def _sp_associate_monitor(event_handle, mo):
    event_handle.add(managed_object=mo, prop= "assoc_state",
        success_value=[LsServerConsts.ASSOC_STATE_ASSOCIATED],
        failure_value=[LsServerConsts.ASSOC_ STATE_FAILED],
            timeout_sec=600, call_back=_sp_associate_callback)

[ STATE_ERROR]

```

Section: (none)
Explanation

Explanation/Reference:

QUESTION 160
DRAG DROP

A Python application is being written to run inside a Cisco IOS XE device to assist with gathering telemetry data. Drag and drop the elements of the stack from the left onto the functions on the right to collect and display the telemetry streaming data.

Select and Place:

visualization platform	Cisco IOS XE device
data collector	Elasticsearch
data generator	Kibana
datastore	Python application

Correct Answer:

	data generator
	datastore
	visualization platform
	data collector

Section: (none)

Explanation

Explanation/Reference:

QUESTION 161

DRAG DROP

Drag and drop the code from the bottom onto the box where the code is missing in the Python script to execute a REST API call to query all the NTP policy names and print the name of each policy. Not all options are used.

Select and Place:



```

import requests, json
from intersight_auth import IntersightAuth

AUTH = IntersightAuth(
    secret_key_filename= '/tmp/secretfile.txt',
    api_key_id= 'api-key-id')
URL= 'https://www.intersight.com/api/v1/'

operations = [ {"resource_path": " ",
               "request_method": "GET" } ]

:
response = None
if operation['resource_path'] == "ntp/Policies":
    response = requests.get( )

    = response.json()

for key, value in jsonResponse.items():
    if key = "Name":
        print(value)

```

for operation in operations

URL+operation
['resource_path'],auth=AUTH

jsonResponse

URL+operation[resource_path],
auth=api_key_id

ntp/Policies

response.json

for each operations

Correct Answer:

```

import requests, json
from intersight_auth import IntersightAuth

AUTH = IntersightAuth(
    secret_key_filename= '/tmp/secretfile.txt',
    api_key_id= 'api-key-id')
URL= 'https://www.intersight.com/api/v1/'

operations = [ {"resource_path": " ntp/Policies ",
               "request_method": "GET" } ]

for operation in operations :
response = None
if operation['resource_path'] == "ntp/Policies":
    response = requests.get(
        URL+operation
        ['resource_path'], auth=AUTH )

    jsonResponse = response.json()
    for key, value in jsonResponse.items():
        if key = "Name":
            print(value)

```

VCEUp

URL+operation[resource_path],
 auth=api_key_id

response.json

for each operations

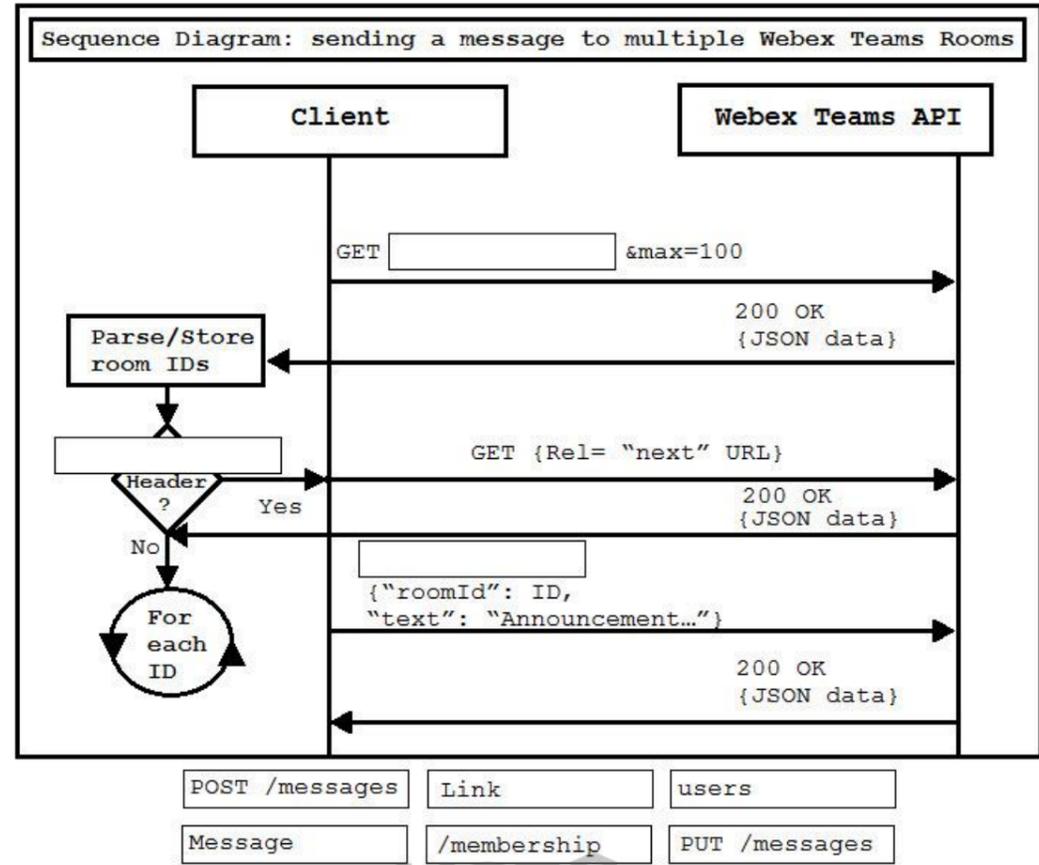
Section: (none)
Explanation

Explanation/Reference:

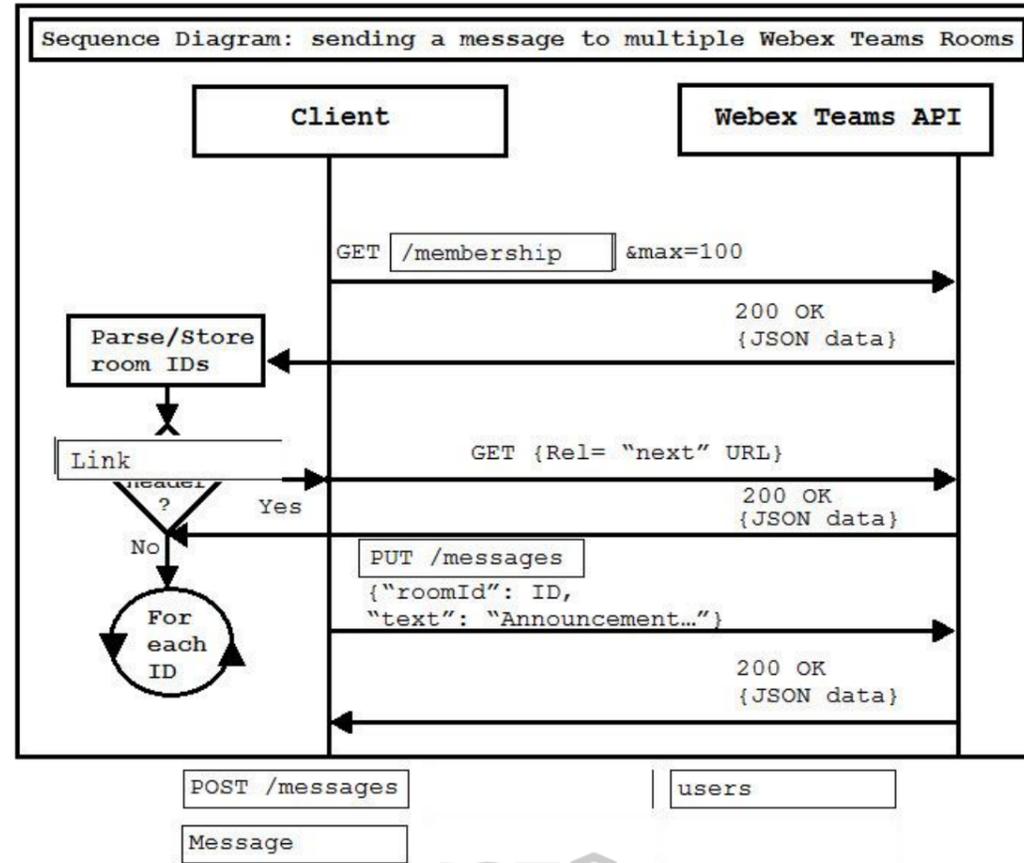
QUESTION 162
 DRAG DROP

Drag and drop the code from the bottom onto the box where the code is missing in the diagram to show how data is processed in Webex Teams. Not all options are used.

Select and Place:



Correct Answer:



Section: (none)
Explanation

Explanation/Reference:

QUESTION 163
DRAG DROP

Drag and drop the descriptions from the left onto the related OAuth-defined roles on the right.

Select and Place:

provides access to a secured resource	authorization server
user access tokens to accept and respond to secured resource requests	client
makes secured resource requests on behalf of the resource owner	resource owner
issues access tokens to the client after authenticating the resource owner	resource server

Correct Answer:

	issues access tokens to the client after authenticating the resource owner
	makes secured resource requests on behalf of the resource owner
	user access tokens to accept and respond to secured resource requests
	provides access to a secured resource

Section: (none)
Explanation

Explanation/Reference:

QUESTION 164
DRAG DROP

Drag and drop the expressions from below onto the code to implement error handling. Not all options are used.

Select and Place:

Answer Area

```
base_url = "https://api.meraki.com/api/v0"
posturl = '%s/networks/%s/staticRoutes' % ((str(base_url), str(networkid)))
headers = {
    'x-cisco-meraki-api-key': api_key,
    'Content-Type': 'application/json'
}
routes = [ {
    "subnet": "10.16.4.0/22",
    "gatewayIp": "10.1.0.20",
    "name": "ROUTE1",
    "enabled": true
},
{
    "subnet": "10.253.254.0/24",
    "gatewayIp": "10.1.0.20",
    "name": "ROUTE2",
    "enabled": true
},
{
    "subnet": "10.168.0.0/21",
    "gatewayIp": "10.1.0.20",
    "name": "ROUTE3",
    "enabled": true
} ]
for route in routes:
    print("Adding static: " + str(route['subnet']))
    response = requests.post(posturl, json=route, headers=headers)
    status = response.status_code
    
    print("Done!")
    
    print("Failed to add static: " + str(route['subnet']) + "\n" + response.text)
```

if status == 601: else: when:
 if status == 201: elif:

Correct Answer:

Answer Area

```

base_url = "https://api.meraki.com/api/v0"
posturl = '%s/networks/%s/staticRoutes' % ((str(base_url), str(networkid)))
headers = {
    'x-cisco-meraki-api-key': api_key,
    'Content-Type': 'application/json'
}
routes = [ {
    "subnet": "10.16.4.0/22",
    "gatewayIp": "10.1.0.20",
    "name": "ROUTE1",
    "enabled": true
},
{
    "subnet": "10.253.254.0/24",
    "gatewayIp": "10.1.0.20",
    "name": "ROUTE2",
    "enabled": true
},
{
    "subnet": "10.168.0.0/21",
    "gatewayIp": "10.1.0.20",
    "name": "ROUTE3",
    "enabled": true
} ]

for route in routes:
    print("Adding static: " + str(route['subnet']))
    response = requests.post(posturl, json=route, headers=headers)
    status = response.status_code
    if status == 201:
        print("Done!")
    else:
        print("Failed to add static: " + str(route['subnet']) + "\n" + response.text)
    if status == 601:
        when:
    elif:

```



Section: (none)
Explanation

Explanation/Reference:

QUESTION 165
DRAG DROP

An engineer must access multiple bots that are running in an internal infrastructure. A different HTTPS URL is required for each bot. The infrastructure has just one public IP address and a Linux server with Apache installed. Drag and drop the actions from the left into the order of steps on the right to enable access to the bots inside. Not all options are used.

Select and Place:

Configure "Let's Encrypt" on the bot servers.	step 1
Enable a forward proxy in Apache.	step 2
Configure Apache virtual hosts.	step 3
Enable a reverse proxy in Apache.	
Configure an Apache .htaccess file.	
Configure "Let's Encrypt" on the Apache server.	

Correct Answer:

Configure "Let's Encrypt" on the bot servers.	Configure Apache virtual hosts.
Enable a forward proxy in Apache.	Configure "Let's Encrypt" on the Apache server.
	Enable a reverse proxy in Apache.
Configure an Apache .htaccess file.	

Section: (none)
Explanation

Explanation/Reference:

QUESTION 166
DRAG DROP

A network engineer needs to retrieve interface data using the Cisco IOS XE YANG Model. Drag and drop the components from the bottom onto the box where the code is missing to complete the RESTCONF URI. Not all options are used.

Select and Place:

```
https:// {host} :{{port}}/restconf/data/
```

:/

Cisco-native-IOS-XE	interface
native	Cisco-IOS-XE
Cisco-IOS-XE-native	IOS-XE-native

Correct Answer:

```
https:// {host} :{{port}}/restconf/data/  
Cisco-IOS-XE-native : native /  
interface  
Cisco-native-IOS-XE  
Cisco-IOS-XE  
IOS-XE-native
```

Section: (none)
Explanation

Explanation/Reference:

Reference: https://www.cisco.com/c/en/us/td/docs/ios-xml/ios/prog/configuration/166/b_166_programmability_cg/restconf_prog_int.html