



**Cisco**

## **Exam Questions 200-901**

Developing Applications and Automating Workflows using Cisco Core Platforms (DEVASC)

**NEW QUESTION 1**

- (Exam Topic 2)

Refer to the exhibit.

```

1  #!/bin/bash
2  apt install nginx
3  export AVAILABLE_SITES_DIR = '/etc/nginx/sites-available'
4  export ENABLED_SITES_DIR = '/etc/nginx/sites_enabled'
5  cd /opt/nginx
6  cat sites.txt | while read site;
7      do
8          cp template.conf "$AVAILABLE_SITES_DIR/$site";
9          ln -s "$AVAILABLE_SITES_DIR/$site" "$ENABLED_SITES_DIR";
10         chown www-data:www-data "$AVAILABLE_SITES_DIR/$site";
11     done
    
```

An engineer must configure a load balancer server. The engineer prepares a script to automate workflow by using Bash. The script install the nginx package, moves to the /optAtginx directory, and reads the sites M We (or further processing Based on the script workflow, which process is being automated within the loop by using the information mi sites txt?

- A. creating a new Me Based on template .conf in the /etc/nginx/sites\_enabled directory for each lie in the sites txt fil
- B. and then changing the file execution permission.
- C. creating a Me per each the in sites txt with the information in template con
- D. creating a link for the previously created fil
- E. and then changing the ownership of the created files
- F. using the content of the file to create the template conf fil
- G. creating a link from the created file to the/etc/nginx/files.enable
- H. and then changing the file execution permissions.
- I. using the information in the file to create a set of empty files in the /etchginx/sites\_enabled directory and then assigning the owner of the file.

**Answer: B**

**NEW QUESTION 2**

- (Exam Topic 2)

A developer needs a list of clients connected to a specific device in a Meraki network. After making a REST API call, the developer receives an unfamiliar response code. Which Cisco DevNet resource should be used to identify the meaning of the response code?

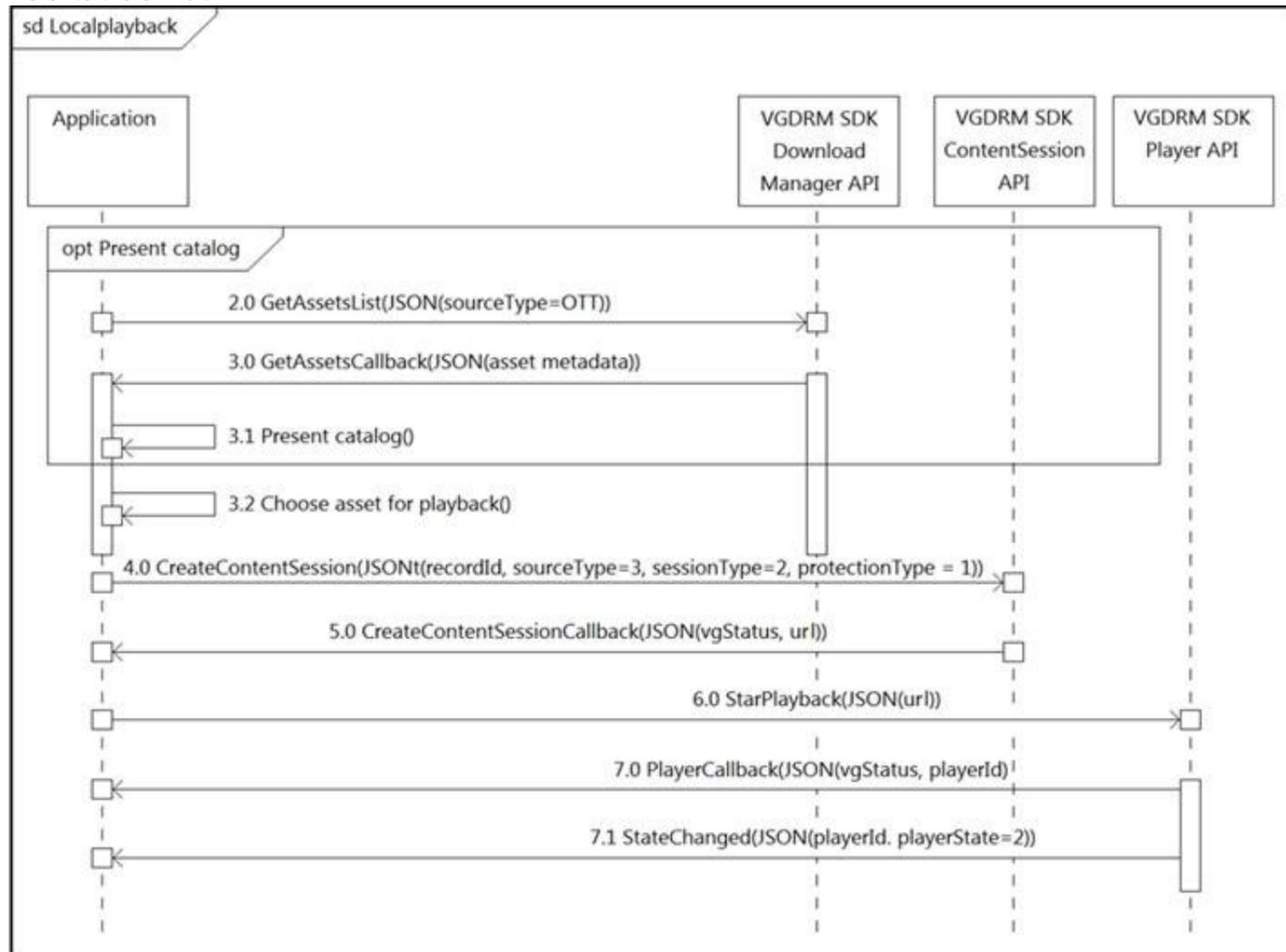
- A. API documentation
- B. Sandbox
- C. Learning Labs
- D. Code Exchange

**Answer: A**

**NEW QUESTION 3**

- (Exam Topic 2)

Refer to the exhibit.



What do all the calls shown in the sequence diagram have in common?

- A. All the calls are optional.
- B. All the calls are asynchronous.
- C. All the calls are synchronous.
- D. All the calls depend on the catalog.

**Answer:** D

**NEW QUESTION 4**

- (Exam Topic 2)

Which application should be used to externally access all applications deployed in the same host machine with a single public IP address and port, when each application listens on different local ports?

- A. reverse proxy
- B. load balancer
- C. DNS
- D. firewall

**Answer:** D

**NEW QUESTION 5**

- (Exam Topic 2)

Which protocol runs over TCP port 22?

- A. SSH
- B. HTTP
- C. Telnet
- D. NETCONF

**Answer:** A

**NEW QUESTION 6**

- (Exam Topic 2)

Drag and drop the Dockerfile instructions from the left onto the descriptions on the right. Not all options are used.

FROM ubuntu:12.04	informs Docker that the container listens on the specified network port(s) at runtime
VOLUME["/var/www","/var/log/apache2","/etc/apache2"]	creates a mount point with the specified name
RUN apt-get update && apt-get install -y -force-yes apache2	configures a container that runs as an executable
ENTRYPOINT["/usr/sbin/apache2ctl","-D","FOREGROUND"]	must be the first instruction in the Docker file
EXPOSE 1521	

- A. Mastered
- B. Not Mastered

**Answer:** A

**Explanation:**

Diagram Description automatically generated

**NEW QUESTION 7**

- (Exam Topic 2)

Drag and drop the code from the bottom onto the box where the code is missing in the Python script to complete a function to return all the clients on a network by using the Cisco Meraki Dashboard API. Not all options are used.



```

1  from requests import request
2  from requests.auth import HTTPBasicAuth
3  from sys import argv
4  url = "https://" + argv[1] + ":443/restconf/data/native/ip/route"
5  auth = HTTPBasicAuth('developer', 'Cisc012345')
6  payload = {
7      "Cisco-IOS-XE-native:route": {
8          "ip-route-interface-forwarding-list": [
9              {
10                 "prefix": argv[2],
11                 "mask": argv[3],
12                 "fwd-list": [
13                     {
14                         "fwd": "GigabitEthernet2",
15                         "interface-next-hop": [
16                             {
17                                 "ip-address": argv[4]
18                             }
19                         ]
20                     }
21                 ]
22             }
23         ]
24     }
25 }
26 headers = {
27     'Content-Type': 'application/yang-data+json',
28     'Accept': 'application/yang-data+json',
29 }
30 response = request("PATCH", url, auth=auth, headers=headers, json = payload,
    . verify=False)

```

A network engineer must change the configuration on devices daily. The Python script must collect CLI arguments from the user, organize data according to the Cisco-IOS-XE-native YANG model, and utilize Cisco REST APIs to make the configuration. Which workflow is being automated by the Python script?

- A. updating an existing route on the device
- B. adding a new route to a device
- C. including a route on the device and overwriting the current routes
- D. deleting the route that is passed through the command-line variables

Answer: A

**NEW QUESTION 9**

- (Exam Topic 2)

Refer to the exhibit.

**Generating Client ID and API Key:**

- Log in to your AMP for Endpoints Console.
- Go to Accounts > Business Settings.
- Click Configure API Credentials under Features to generate the Client ID and secure API Key.

Once you have the API client ID and API key, you can make the API calls as follows:

```
https://<your_client_id>:<your_api_key>@<api_endpoint>
```

Alternatively you can use Basic HTTP Authentication. Base 64 encode the string ":", and send that prefixed with the string "Basic" as the authorization header. For instance, if your client\_id was 1234, and your api\_key was "atest", then it would be base64 encoded to "MTIzNDphdGVzdA==", and your header would be:

```
Authorization: Basic MTIzNDphdGVzdA==
```

The documentation outlines how to use credentials for the AMP API Which script successfully performs an API call using basic authentication?

A)

```

import requests
amp_client_id = 'alb2c3d4e5f6g7h8i9j0'
amp_login_password = 'l0gln_p@ssw0rd'
url = 'https://api.amp.cisco.com/v1/version'
request = requests.get(url,
    auth=(amp_client_id, amp_login_password))
print(request.json())

```

B)

```
import requests
amp_client_id = 'alb2c3d4e5f6g7h8i9j0'
amp_api_key = 'alb2c3d4-e5f6-g7h8-i9j0-k1l2m3n4o5p6'
url = 'https://api.amp.cisco.com/v1/version'
request = requests.get(url)
print(request.json())
```

C)

```
import requests
amp_auth_token = 'alb2c3d4e5f6g7h8i9j0 k1l2m3n4o5p6'
url = 'https://api.amp.cisco.com/v1/version'
request = requests.get(url,
    auth=(amp_auth_token))
print(request.json())
```

D)

```
import requests
amp_client_id = 'alb2c3d4e5f6g7h8i9j0'
amp_api_key = 'alb2c3d4-e5f6-g7h8-i9j0-k1l2m3n4o5p6'
url = 'https://api.amp.cisco.com/v1/version'
request = requests.get(url,
    auth=(amp_client_id, amp_api_key))
print(request.json())
```

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

**Answer:** D

**NEW QUESTION 10**

- (Exam Topic 2)

A company wants to accelerate the adoption of technologies that will simplify its operations. Staff have different skill levels and are looking for a single site to find easy-to-consume beginner, intermediate, and advanced multidomain use cases. Which site should be used?

- A. DevNet Ecosystem Exchange
- B. DevNet Automation Exchange
- C. DevNet Creations
- D. DevNet Support Forum

**Answer:** D

**NEW QUESTION 10**

- (Exam Topic 2)

Refer to the exhibit.

```
import requests
from requests.auth import HTTPBasicAuth
from config import url, username, password
response = requests.login(url, auth=HTTPBasicAuth (username, password), verify=False)
print response.status_code
```

The script returns an output of 401. To use the supplied URL, an HTTP GET request must be sent with an Authorization header. The header value is a Base64 encoded concatenation of the username and password. Which action must be taken to return an output of 200?

- A. Change the verify=False setting in the request to verify=True to enable HTTP Basic authentication
- B. Modify the method from LOGIN to GET and supply the username ;password value as JSON payload
- C. Verify that the username and password values imported from the configuration file are still valid.
- D. Insert an Authorization header with the values username password from the supplied configuration file.

**Answer:** C

**NEW QUESTION 14**

- (Exam Topic 2)

What are two properties of private IP addresses? (Choose two.)

- A. They can be used to access the Internet directly.
- B. They are more secure than public IP addresses.
- C. They are not globally unique.
- D. They can be repeated within the same local network.
- E. They are controlled globally by an IP address registry.

**Answer:** BD

**NEW QUESTION 15**

- (Exam Topic 2)

What is the purpose of a MAC address on a network device?

- A. unique network address that identifies the network interface of a device
- B. unique network interlace address that is provided by the DHCP server
- C. unique hardware address that identifies the network interface of a device
- D. unique hardware interface address that is provided by the central switch

**Answer:** C

**NEW QUESTION 19**

- (Exam Topic 2)

What are two considerations when selecting the "best route" for a network device to reach its destination? (Choose two.)

- A. MAC address
- B. metrics
- C. administrative distance
- D. IP address
- E. subnet mask

**Answer:** BC

**NEW QUESTION 23**

- (Exam Topic 2)

A new application is being developed with specific platform requirements. The platform and application deployment and the ongoing platform management must be fully automated. The application includes a large database component that has significant disk I/O requirements. Which application deployment type meets the requirements?

- A. Python virtual environment
- B. virtual machine
- C. bare metal
- D. container

**Answer:** B

**NEW QUESTION 24**

- (Exam Topic 2)

How do XML and JSON compare regarding functionality?

- A. JSON natively supports arrays and XML does not natively support arrays.
- B. XML provides support for mapping data structures into host languages than JSON.
- C. XML provides more human readability than JSON.
- D. JSON provides support for data types than XML.

**Answer:** A

**NEW QUESTION 26**

- (Exam Topic 2)

Which API must an engineer use to change a netmask on a Cisco IOS XE device?

- A. Meraki
- B. RESTCONF/YANG
- C. SD-WAN
- D. DNAC

**Answer:** B

**NEW QUESTION 31**

- (Exam Topic 2)

Refer to the exhibit.

```

SDK Documentation:

Class: Devices

Device List: get_device_list()
Get device: get_device_by_id(id)
Delete device: delete_device_by_id(id)
Device status: inventoryStatusDetail
Device Parameters:
    id
    upTime
    type
    
```

A Python script must delete all Cisco Catalyst 9300 Series switches that have an uptime that is greater than 90 days The script must also query for the status of all the other devices Drag and drop the code from the bottom onto the bottom box the code is missing to complete the script Not all options are used

```

Answer Area

from dnacentersdk import DNACenterAPI

device_type = "Cisco Catalyst 9300 Switch"
api_session = DNACenterAPI(
    base_url="https://sandboxdnac.cisco.com",
    username="user",password="password"
)

devices = 

for device in devices:
    if int(device.upTime.split()[0]) > 90:
        if device.type == device_type:
            output = 
            print(output)

        else:
            selected_device = 
            output = 
            print (output)
    
```

- 
- 
- 
- 
- 

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:  
 Table Description automatically generated

**NEW QUESTION 36**  
 - (Exam Topic 2)  
 Refer to the exhibit.

```

1 #import dnac sdk
2 from dnacentersdk import DNACenterAPI
3 #connection to dnac
4
5 username = 'user1'
6 password = 'secret'
7 base_url = 'https://192.168.1.1'
8
9 dnac = DNACenterAPI(username=username, password=password, base_url=base_url,
• version='1.3.3', verify=False)
10
11 # Get list of ports on device using get all interfaces API call
12 port_list_1 = [item['portName'] for item in
• dnac.devices.get_all_interfaces()['response']
13
14     if 'da4606c3-63ad-4ed4-8f35-6bfec7c2df04' in
15         item['deviceId']]
16
17 # Sort list items
18 port_list_1.sort()
19 # Check the number of ports on the device
20 print(f'The list of interfaces contains {len(port_list_1)} items.')
21
22 # Output
23 # The list of interfaces contains 38 items.
24
25 # Get list of interfaces using the get interface info by device id api call
26 port_list_2 = [item['portName'] for item in
27     dnac.devices.get_interface_info_by_id('da4606c3-63ad-4ed4-8f35-
28     6bfec7c2df04')['response']]
29
30 # Sort list items
31 port_list_2.sort()
32 # Check the number of ports on the device
33 print(f'The list of interfaces contains {len(port_list_2)} items.')
34
35 # Output
36 # The list of interfaces contains 54 items.

```

An engineer writes a Python script that uses two different API calls to query Cisco DNA Center for the number of interfaces on a device. The engineer notices that the two API calls produce different results. Why are fewer interfaces returned for the same device when the 'get\_all\_interfaces' API call is used?

- A. times out
- B. rate limit
- C. pagination
- D. invalid password

**Answer: C**

#### NEW QUESTION 40

- (Exam Topic 2)

What is the purpose of the first three pairs of digits in a MAC address?

- A. defines a routing identifier for the client
- B. indicates the IP address of the client in Hex
- C. defines packet forwarding priority sent or received by the adapter
- D. indicates vendor of the network card or adapter

**Answer: D**

#### NEW QUESTION 41

- (Exam Topic 2)

What is the function of IP address in networking?

- A. specifies the type of traffic that is allowed to roam on a network
- B. represents the unique ID that is assigned to one host on a network
- C. specifies resource's location and the mechanism to retrieve it
- D. represents a network connection on specific devices

**Answer: B**

#### NEW QUESTION 44

- (Exam Topic 2)

A new application is being developed that must be hardware independent. The application includes an administrative component which is accessed using a Windows desktop GUI. Installation and management of the environment must be fully automated. Which application deployment type meets the requirements?

- A. bare metal
- B. virtual Python environment
- C. container
- D. virtual machine

Answer: C

**NEW QUESTION 47**

- (Exam Topic 2)

Which tool is used to block all traffic to the domain by using a single API call?

- A. Cisco ISE
- B. Cisco Firepower
- C. Cisco AMP
- D. Cisco Umbrella

Answer: B

**NEW QUESTION 50**

- (Exam Topic 2)

Drag and drop the code snippets from the bottom to the blanks in the code to complete the HTTP response. Not all options are used.

```
Request URL: http://www.example.com/
[ ] : GET
[ ] : 200 OK

Remote Address: [2606:2800:220:1:248:1893:25c8:1946]:80
Referrer Policy: strict-origin-when-cross-origin
Response Headersview source
Accept-Ranges: bytes
Age: 396561
Cache-Control: max-age=604800
[ ] : gzip
Content-Length: 648
[ ] : text/html; charset=UTF-8

Date: Sat, 20 Nov 2020 20:49:34 GMT
Etag: "3147526947+ident"
Expires: Sat, 21 Nov 2020 20:49:34 GMT
Last-Modified: Thu, 17 Oct 2019 07:18:26 GMT
Server: ECS (dna/63AA)
Vary: Accept-Encoding
X-Cache: HIT

Request Headersview source
Accept: text/html,application/xhtml+xml,application/xml;q=0.9,
image/avif,image/webp,image/apng,*/*;q=0.8,application/signed-exchange;v=b3;q=0.9
Accept-Encoding: gzip, deflate
Accept-Language: en-US,en;q=0.9
```

Request Type	Request Control
Status Code	Content-Type
Request Method	Content Code
Content-Encoding	

- A. Mastered
- B. Not Mastered

Answer: A

**Explanation:**

Graphical user interface, text, application Description automatically generated

**NEW QUESTION 52**

- (Exam Topic 2)

How does a synchronous API request differ from an asynchronous API request?

- A. clients receive responses with a task id for further processing
- B. clients subscribe to a webhook for operation results
- C. clients are able to access the results immediately
- D. clients poll for the status of the execution of operations

Answer: C

**NEW QUESTION 54**

- (Exam Topic 2)

Refer to the exhibit.

**List Messages**  
 Lists all messages in a room. Each message will include content attachments if present.  
 The list sorts the messages in descending order by creation date.  
 Long result sets will be split into pages.

**GET** /v1/messages

**Query Parameters**

**roomId**  
 string Required  
 List messages in a room, by ID.

**parentId**  
 string  
 List messages with a parent, by ID.

**Try it** **Example**

**Request** **Response**

```
https://webexapis.com/v1/messages?roomId=Y2lzY29zcGFyazovL3VzL1JPT00vYmJkZWl0YXN0NDctZjE0YmIwYzRkMTU0&parentId=Y2lzY29zcGFyazovL3VzL01FU1NBR0UvZW11ZTtZjAtN2RhMS0xMWU5LTg2NTgtZTkzYzNiODZjZmFm&mentionedPeople=Y2lzY29zcGFyazovL3VzL1BFT1BMRS8yNDlmNzRkOS1kYjhhLTQzY2EtODk2Yi04NzllZDI0MGFjNTM&before=2016-04-21T19:01:55.966Z&beforeMessage=Y2lzY29zcGFyazovL3VzL01FU1NBR0UvOTJkYjNiZTA0NDNiZC0xMWU2LTlhZTkzZGQ1YjNkZmM1NjVj&max=100
```

A developer needs to automatically retrieve all of the messages of a Webex room with the roomId of HY2l2Y292cGFyazovL3Vz397748444YjU5NjAtNTk0Zj0xMWVhLTk0Mj". Using the Webex API documentation shown, drag and drop the code snippets from below onto the code to complete the Python script to list all of the messages in the room. Not all options are used.

```
import requests

webex_token = "NDAA2OGV...f0-4434-a696-84fee4047e0a"

room_id = "Y2lzY29zcGF...jU5NjAtNTk0Zi0xMWVhLTk0Mj"

url = "https://webexapis.com/v1/ [ ] [ ] = " + [ ]

payload = {}
headers = {
    'Authorization': 'Bearer ' + [ ]
}

response = requests.request("GET", url, headers=headers, data = payload)

print(response.text.encode('utf8'))
```

webex\_token    room    roomId

messages?    roomId    messages

- A. Mastered
- B. Not Mastered

**Answer:** A

**Explanation:**  
 Graphical user interface Description automatically generated with medium confidence

**NEW QUESTION 55**

- (Exam Topic 2)  
 What are two benefits of using VLANs? (Choose two.)

- A. limits the devices that can join the network
- B. segments the broadcast domain
- C. extends the broadcast domain
- D. allows all network devices to be accessible from any host on the network
- E. enables the logical grouping of devices that belong to different Layer 2 devices

**Answer:** BE

**NEW QUESTION 60**

- (Exam Topic 2)  
 A company is adopting DevOps as part of an internal transformation, and is reviewing the success of the first deployments. Developers and engineers are working together to resolve any resulting issues. However, this new way of working has increased overhead, and the team is finding it difficult to complete releases in time. Which area of the CALMS framework must the company target for improvement?

- A. Collaboration
- B. Lean

- C. Sharing
- D. Measurement

**Answer:** B

**Explanation:**

Reference: <https://blog.sonatype.com/principle-based-devops-frameworks-calms>

**NEW QUESTION 65**

- (Exam Topic 2)

Why is refactoring done during test-driven development?

- A. to enable larger objects and longer methods
- B. to improve maintainability and readability
- C. to ensure that the previous uses of the objects are explained
- D. to ensure the duplication of essential code

**Answer:** B

**NEW QUESTION 70**

- (Exam Topic 2)

Refer to the exhibit.



OWASP threat does this example demonstrate?

- A. Broken access control
- B. SQL injection
- C. Man-in-the-middle
- D. Cross-site-scripting

**Answer:** D

**NEW QUESTION 72**

- (Exam Topic 2)

What is a benefit of model-driven programmability?

- A. It addresses the static architecture of traditional networks being decentralized and complex.
- B. By modeling data, it ensures that vast quantities of data are usable for monitoring.
- C. It provides a programmatic and standards-based way of writing configurations to any network device.
- D. It simplifies management and operations by decoupling the networking hardware from its control mechanism.

**Answer:** D

**NEW QUESTION 77**

- (Exam Topic 2)

Refer to the exhibit.

```

1  - hosts: servers
2    tasks:
3
4    - name: task1
5      apt:
6        name: apache2
7        state: absent
8
9    - name: task2
10     apt:
11       name: nginx
12       state: present
13
14    - name: task3
15     apt:
16       name: "*"
17       state: latest

```

A developer must check packages on web load balancers that use nginx packages. The developer updates the servers as required in Ansible inventory and prepares an Ansible playbook to automate this workflow on related servers. Which process is being automated by the Ansible playbook?

- A. verifying that nginx is installed only if apache2 is unavailable on the system, and then updating all the other packages
- B. verifying, without installing, that apache2 is unavailable and that nginx is installed, and then updating the repository to the latest version
- C. uninstalling the apache2 server, installing the nginx server, and then updating all the packages to the latest version
- D. installing nginx, uninstalling apache2, and then verifying that the package repository is at the latest version

**Answer: B**

**NEW QUESTION 82**

- (Exam Topic 2)

Several teams at a company are developing a new CRM solution to track customer interactions with a goal of improving customer satisfaction and driving higher revenue. The proposed solution contains these components:

- MySQL database that stores data about customers
- HTML5 and JavaScript UI that runs on Apache
- REST API written in Python

What are two advantages of applying the MVC design pattern to the development of the solution? (Choose two.)

- A. to enable multiple views of the same data to be presented to different groups of users
- B. to provide separation between the view and the model by ensuring that all logic is separated out into the controller
- C. to ensure data consistency, which requires that changes to the view are also made to the model
- D. to ensure that only one instance of the data model can be created
- E. to provide only a single view of the data to ensure consistency

**Answer: BD**

**NEW QUESTION 84**

- (Exam Topic 2)

Refer to the exhibit.

```

>>> response_data = requests.get(base_url + request_url, cookies=cookies)
Traceback (most recent call last):
  File "<stdin>", line 1, in <module>
NameError: name 'requests' is not defined
>>>

```

A Python code has been written to query a device. The executed code results in the error shown. Which action resolves the problem?

- A. import json
- B. requests("GET", base\_url + request\_url, cookies=cookies)
- C. pip install requests
- D. import requests

**Answer: D**

**NEW QUESTION 87**

- (Exam Topic 2)

Refer to the exhibit.

```

--- README.md-repo 2019-10-06 21:15:59.000000000 +0100
+++ README.md      2019-10-06 21:07:35.000000000 +0100
@@ -88,8 +88,6 @@
    \ \ \

-
-
  ## Troubleshooting

  ### CMake
@@ -162,4 +160,13 @@

  ## References

+### Mosquitto
+
+* [github] (https://github.com/eclipse/mosquitto)
+* [homepage] (https://mosquitto.org)
+
+### MQTT
+
+* [organisation] (http://mqtt.org)
+

```

The output of the diff-u README.md-repo README.md command is shown. The original file was 165 lines long How many lines are in the edited copy of the file?

- A. 162
- B. 165
- C. 172
- D. 173

**Answer: C**

**NEW QUESTION 92**

- (Exam Topic 2)

Which tool allows changes to the configuration management toolset to be tested?

- A. Cisco VIRL
- B. NAPALM
- C. Ansible
- D. pyATS

**Answer: D**

**NEW QUESTION 94**

- (Exam Topic 2)

What does a load balancer distribute in a network environment?

- A. outgoing connections to the network
- B. incoming traffic across multiple servers
- C. different TCP connections to the routers
- D. traffic in the network by leveraging the switch architecture

**Answer: B**

**NEW QUESTION 96**

- (Exam Topic 2)

A file that already exists in a local repository is updated. Which command must be executed to ensure that the changes in the file are included in the next Git commit?

- A. git update
- B. git merge
- C. git add
- D. git rebase

**Answer: A**

**NEW QUESTION 101**

- (Exam Topic 2)

What are two key capabilities of Cisco Finesse? (Choose two.)

- A. Finesse includes an RPC API that enables the development of custom gadgets.
- B. Agents access Finesse from a browser without needing to install or configure anything on the client machine.

- C. Finesse automatically collects telemetry data
- D. An OpenDNS utility is preconfigured and ready to use on Finesse.
- E. Gadget containers provide a seamless experience in a single user interface.

**Answer:** BE

**NEW QUESTION 105**

- (Exam Topic 2)

How does a developer create and switch to a new branch called "my-bug-fix" to develop a product fix?

- A. git checkout -b my-bug-fix
- B. git branch -b my-bug-fix
- C. git branch my-bug-fix
- D. git checkout my-bug-fix

**Answer:** A

**Explanation:**

<https://www.shellhacks.com/git-create-new-branch-and-checkout/>

**NEW QUESTION 109**

- (Exam Topic 2)

Which HTTP response code should be returned when the request is completed, but there is no content to send for the request?

- A. A.-100B.204C.302D.402

**Answer:** B

**Explanation:**

Reference: [https://developer.mozilla.org/en-US/docs/Web/HTTP/Status#successful\\_responses](https://developer.mozilla.org/en-US/docs/Web/HTTP/Status#successful_responses)

**NEW QUESTION 114**

- (Exam Topic 1)

Fill in the blanks to complete the Python script to update the Webex Teams membership of a room using the Python requests library import requests

```

import requests
url = "https://api.ciscospark.com/v1/memberships/Y2LzY29zcGFiYzov371508156INISVAvOTJiM2RkOWEiNjc1ZC00YTQxLThjNDEtMmFiZGY4OWY0NGY0OjExNzJkNmYwLTJiY2M1MTF1OS1iOWI3LWNmMjg3MTJhYTgzNw"

payload = [{"isModerator": true}]
headers = {
    'Authorization': 'Bearer ',
    'Content-Type': 'application/json'
}

response = requests [ ] ("PATCH" url headers= [ ] data = [ ])
print(response.text.encode('utf8'))

```

- A. Mastered
- B. Not Mastered

**Answer:** A

**Explanation:**

request, headers , payload

**NEW QUESTION 118**

- (Exam Topic 1)

Refer to the exhibit.

**List Messages**

Lists all messages in a room. Each message will include content attachments if present.

The list sorts the messages in descending order by creation date.

Long result sets will be split into [pages](#).

**GET** /v1/messages

**Query Parameters**

**roomId**  
string **Required**  
List messages in a room, by ID.

**mentionedPeople**  
array  
List messages with these people mentioned, by ID. Use me as a shorthand for the current API user.

**before**  
string  
List messages sent before a date and time.

**beforeMessage**  
string  
List messages sent before a message, by ID.

**max**  
number  
Limit the maximum number of messages in the response.  
Default: **50**

Try it
Example

```
GET /v1/messages{?roomId,mentionedPeople,before,beforeMessage
```

**Header**

Authorization  Use personal access token

Bearer .....

*This limited-duration personal access token is hidden for your security.*

**Query Parameters**

**roomId** **Required** e.g. Y2lzY29zcGFyazovL3VzL1JPT00vYmJj

**mentionedPeople** e.g. Y2lzY29zcGFyazovL3VzL1BFT1BMR56

**before** e.g. 2016-04-2Tf9:01:55:966Z

**beforeMessage** e.g. Y2lzY29zcGFyazovL3VzL1FU1NBROL

**max** e.g. 100

Run

```
bash-3.2$ curl -H "Content-Type: application/json" -H "Authorization: Fj2zzykEa091ic9GK2j8LtE1HklHklH6oRHPQdw1Pat60i7ndtHHnWzL2b5pgMg14Kk_B9EI59isacLy7-NarA02n9H-tGgt-SxQ39iDejgcs" -i -X POST -d "{ \"roomId\": \"Y2geK53sjEknosrC7SwQ5ZGL99pHgiuScB7DfNVusr8Xx4wDKLiPORcEkryAnM3QmK9LQZsP0G4\", \"text\": \"test2\" }" https://api.ciscospark.com/v1/messages

HTTP/1.1 401 Unauthorized
Via: 1.1 linkerd
TrackingID: ROUTER_5E0FDC8C-EB6F-01BB-00EF-806BF1BD00EF
Date: Sat, 04 Jan 2020 00:30:04 GMT
Server: Redacted
Content-Length: 267
Content-Type: application/json
Strict-Transport-Security: max-age=63072000; includeSubDomains; preload

{"message": "The request requires a valid access token set in the Authorization request header.", "errors": [{"description": "The request requires a valid access token set in the Authorization request header."}], "trackingId": "ROUTER_5E0FDC8C-EB6F-01BB-00EF-806BF1BD00EF"}

bash-3.2$
```

A developer is troubleshooting an API with the given API with the given API documentation and cURL command. What is the cause of this problem?

- A. The user is not allowed to post messages from their account
- B. The request body is missing or incomplete
- C. The API token specified is expired
- D. The authorization header is missing or incomplete

**Answer: C**

**NEW QUESTION 121**

- (Exam Topic 2)  
 Refer to the exhibit.

POST - https://webexapis.com/v1/teams

Params Authorization Headers (9) Body Pre-request Script Tests Settings

Headers 8 hidden

KEY	VALUE	DESCRIPTION
Authorization	Bearer OTVjNDk5ZGQtNDc5Yi00MwZGEtZGINDYNzdh_PF84_consumer	

Body

```
1 {
2   "team": "cisco"
3 }
4
```

Body Cookies Headers (9) Test Results Status: 400 Bad Request Time: 173 ms Size: 514 B Sav

Pretty Raw Preview Visualize JSON

```
1 {
2   "message": "The request could not be understood by the server due to malformed syntax.",
3   "errors": [
4     {
5       "description": "The request could not be understood by the server due to malformed syntax."
6     }
7   ],
8   "trackingId": "ROUTER_5FBACE02-90AE-01BB-6DE-AC12DF566D6E"
9 }
```

A developer wants to create a room named cisco through Webex API. The developer prepares the request by putting an API token inside the authorization header; however, the given HTTP call returns error code 400. How must the call parameters be changed to ensure a valid response?

- A. Replace the team body parameter with the name body parameter.
- B. Replace cisco with a valid name for a team.
- C. Change the token in the header with the authorization token.
- D. Change the HTTP method of the call to PUT.

Answer: A

**NEW QUESTION 123**

- (Exam Topic 1)

Which two statements describe the traits of an asynchronous API call? (Choose two.)

- A. The order in which API calls return can be guaranteed
- B. A call to an API does not block the code, but rather it allows application processing to continue
- C. The end user can experience latency or performance lag while waiting for the API call to return
- D. Code execution blocks or waits for the call to an API to return.
- E. A callback function typically is used to process the response from an API call

Answer: BE

**NEW QUESTION 128**

- (Exam Topic 1)

Drag and drop the characteristics from the left onto the corresponding software development methodologies on the right?

The focus is on advanced planning and outcome prediction.

Users receive functional software and can provide feedback after the product is available.

The timeline is followed and feedback is gathered before product completion.

Developers respond to requirement changes throughout the development process.

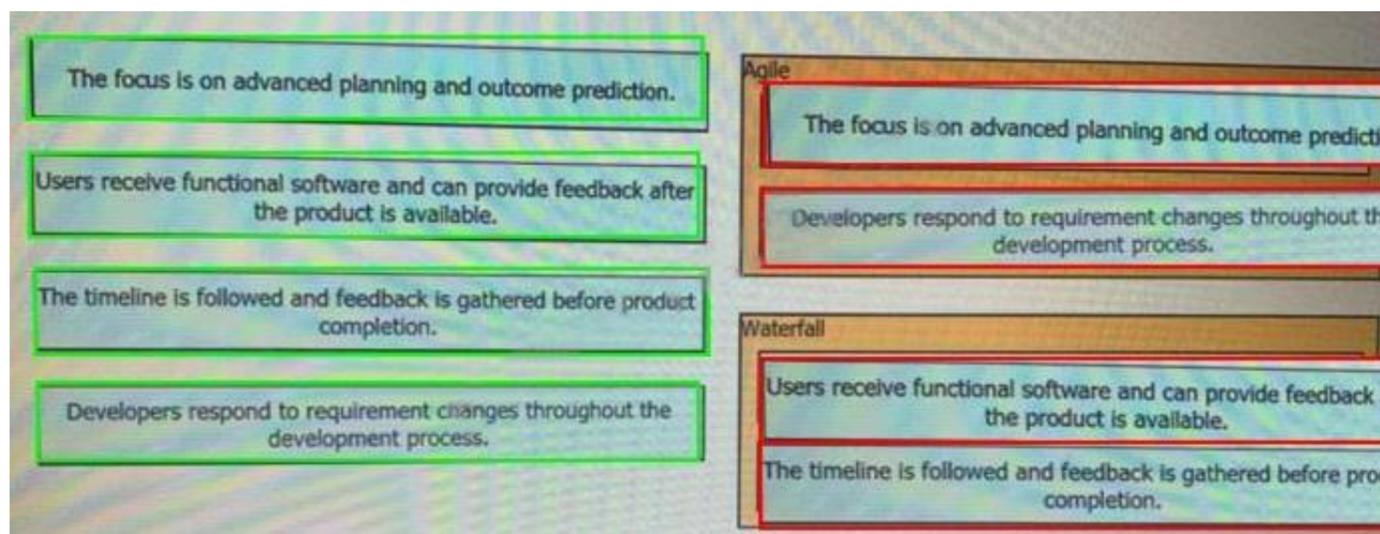
Agile

Waterfall

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:



**NEW QUESTION 133**

- (Exam Topic 1)

What are two benefit of managing network configuration via APIs? (Choose two.)

- A. configuration on devices becomes less complex
- B. more security due to locking out manual device configuration
- C. increased scalability and consistency of network changes
- D. eliminates the need of legacy management protocols like SNMP
- E. reduction in network changes performed manually

**Answer:** CE

**NEW QUESTION 137**

- (Exam Topic 1)

Refer to the exhibit.

```

1      ---
2      - hosts: {{ router }}
3        gather_facts: true
4        connection: local
5
6      tasks:
7      - ios_command
8        commands:
9        - show run
10       provider: "{{ router_credentials }}"
11       register: config
12
13     - copy:
14       content: "{{ config.stdout[0] }}"
15       dest: "etc/ansible/configs/command_{{ router_hostname }}.txt
16     ...
    
```

What is the effect of this Ansible playbook on an IOS router?

- A. A new running configuration is pushed to the IOS router.
- B. The current running configuration of the IOS router is backed up.
- C. The start-up configuration of the IOS router is copied to a local folder.
- D. A new start-up configuration is copied to the IOS router.

**Answer:** B

**NEW QUESTION 140**

- (Exam Topic 1)

A small company has 5 servers and 50 clients. What are two reasons an engineer should spilt this network into separate client and server subnets? (Choose two)

- A. Internet access to the servers will be denied on the router.
- B. A router will limit the traffic types between the clients and servers.
- C. Subnets will split domains to limit failures.
- D. A router will bridge the traffic between clients and servers.
- E. Subnets provide more IP address space for clients and servers.

**Answer:** AC

**NEW QUESTION 144**

- (Exam Topic 1)  
 Refer to the exhibit.

```
[
  {
    "type": "fruit",
    "items": [
      {
        "color": "green",
        "items": [
          "kiwi",
          "grape"
        ]
      },
      {
        "color": "red",
        "items": [
          "strawberry",
          "apple"
        ]
      }
    ]
  },
  {
    "type": "vegs",
    "items": [
      {
        "color": "green",
        "items": [
          "lettuce"
        ]
      },
      {
        "color": "red",
        "items": [
          "pepper"
        ]
      }
    ]
  }
]
```

A REST API return this JSON output for a GET HTTP request, Which has assigned to a variable called "vegetables" Using python, which output is the result of this command?

```
print(filter(lambda l: l['type'] == 'fruit', vegetables)[0]['items'][0]['items'][0])
```

- A. Lettuce
- B. Kiwi
- C. ['kiwi', 'grape']
- D. {'color': 'green', 'items': ['kiwi', 'grape']}

Answer: B

**NEW QUESTION 148**

- (Exam Topic 1)  
 When using the Bash shell, how it the output of the devnet command saved to a tile named "output.txt"?

- A. devnet & output.txt
- B. devnet > output.txt
- C. devnet < output.txt
- D. devnet | output.txt

Answer: B

**Explanation:**

Reference: <https://askubuntu.com/questions/420981/how-do-i-save-terminal-output-to-a-file>

**NEW QUESTION 150**

- (Exam Topic 1)

Which service provides a directory lookup for IP addresses and host names?

- A. DNS
- B. DHCP
- C. SNMP
- D. NAT

**Answer: A**

**NEW QUESTION 155**

- (Exam Topic 1)

Fill in the blanks to complete the python script to retrieve a list of network devices using the Cisco DNA center API.

```
import requests
url = "https://myDNAserver/dna/intent/api/v1/network-device"
payload = {}
headers = {'x-auth-token': 'eyJ0eXAiOiJKV1QiLCJhbGciOiJIUzI1NiJ9.eyJzdWIiOiI1ZDE0OWZkMjhlZTY2MmQ3NGM5YzE5ZTIiLCJmYzMiOiJmV4cCI6MTU3MjM3ODE5MCwidXNlcm5hbWUiOiJraXN371274739.zhK5LPQd501ZUpZi0IH_qrgOXtllNbxSFFF7JOEtRIs'}
}
response = requests.request( [ ] , url,
headers = [ ] , data = [ ] )
print(response.text.encode('utf8'))
```

- A. Mastered
- B. Not Mastered

**Answer: A**

**Explanation:**

Solution as below.

```
import requests
url = "https://myDNAserver/dna/intent/api/v1/network-device"
payload = {}
headers = {'x-auth-token': 'eyJ0eXAiOiJKV1QiLCJhbGciOiJIUzI1NiJ9.eyJzdWIiOiI1ZDE0OWZkMjhlZTY2MmQ3NGM5YzE5ZTIiLCJmYzMiOiJmV4cCI6MTU3MjM3ODE5MCwidXNlcm5hbWUiOiJraXN371387657.zhK5LPQd501ZUpZi0IH_qrgOXtllNbxSFFF7JOEtRIs'}
}
response = requests.request("GET" , url,
headers = headers , data = payload )
print(response.text.encode('utf8'))
```

**NEW QUESTION 159**

- (Exam Topic 1)

Refer to the exhibit.

List the clients that have used this network in the timespan

HTTP REQUEST

GET /networks/ {networkId}/clients

PARAMETERS

t0

The beginning of the timespan for the data. The maximum lookback period is 31 days from today.

timespan

The timespan for which the information will be fetched. If specifying timespan, do not specify parameter t0. The value must be in seconds and be less than or equal to 31 days. The default is 1 day.

perPage

The number of entries per page returned. Acceptable range is 3 – 1000. Default is 10.

startingAfter

A token used by the server to indicate the start of the page. Often this is a timestamp or an ID but it is not limited to those. This parameter should not be defined by client applications. The link for the first, last, prev, or next page in the HTTP Link header should define it.

endingBefore

A token used by the server to indicate the end of the page. Often this is a timestamp or an ID but it is not limited to those. This parameter should not be defined by client applications. The link for the first, last, prev, or next page in the HTTP Link header should define it.

```
base_url = "https://api.meraki.com/api/v0"
network_id = "L_12345678910"
api_key = "1098hadpfsiapsf8ahf8ohp"
requests.<item 1> (
  <item 2> + "/<item 3>/" + <item 4>, "<item 5>",
  headers = {
    "X-Cisco-Meraki-API-Key": <item 6> ,
    "Content-Type": "<item 7>"
  },
  <item 8>={"<item 9>":<item 10>})
```

Drag and drop the code from the left code from the left onto the item number on the right to complete the Meraki code to obtain a list of client which have used this network.

params	<item 1>
networks	<item 2>
timespan	<item 3>
get	<item 4>
432000	<item 5>
base_url	<item 6>
application/json	<item 7>
network_id	<item 8>
clients	<item 9>
api_key	<item 10>

- A. Mastered
- B. Not Mastered

**Answer:** A

**Explanation:**

1 - d, 2 - f, 3 - b, 4 - h, 5 - i, 6 - j, 7 - g, 8 - a, 9 - c, 10 - e

**NEW QUESTION 164**

- (Exam Topic 1)

Before which process is code review performed when version control is used?

- A. committing code
- B. branching code
- C. merge of code
- D. checkout of code

**Answer:** C

**NEW QUESTION 166**

- (Exam Topic 1)

A Company is looking for cloud deployment which will use the on-premise infrastructure, is user self-service, and easy to scale. Which cloud solution should be selected for these requirements?

- A. multi
- B. public
- C. private
- D. hybrid

**Answer:** C

**NEW QUESTION 171**

- (Exam Topic 1)

Which CI/CD tool is an automation tool used to build, test, and deploy software?

- A. Nagios
- B. Gradle
- C. Jenkins
- D. Git

**Answer:** C

**Explanation:**

Reference:

<https://www.infoworld.com/article/3271126/what-is-cicd-continuous-integration-and-continuous-delivery-expla>

**NEW QUESTION 173**

- (Exam Topic 1)

Refer to the exhibit.

```

$ diff -u5 fish.py cat.py
--- fish.py      2020-01-02 09:41:02.840000000 +0100
+++ cat.py      2020-01-02 09:41:06.8859999800 +0100
@@ -160,11 +160,12 @@

    @single_request_timeout.setter
    def single_request_timeout(self, value):
        """The timeout (seconds) for a single HTTP REST API request."""
        check_type(value, int, optional=True)
-       assert value is None or value > 0
+       if value is not None and value <= 0:
+           raise ValueError("single_request_timeout must be positive integer")
        self._single_request_timeout = value

    @property
    def wait_on_rate_limit(self)
        """Automatic rate-limit handling.

```

The output of a unified diff when comparing two versions of a python script is shown. Which two "single\_request\_timeout ()"

A.

```

file: cat.py
160
161 @single_request_timeout.setter
162 def single_request_timeout(self, value):
163     """The timeout (seconds) for a single HTTP REST API request."""
164     check_type(value, int, optional=True)
165     assert value is None or value > 0
166     if value is not None and value <= 0:
167         raise ValueError("single_request_timeout must be positive integer")
168     self._single_request_timeout = value
169

```

B.

```

file: fish.py
160
161 @single_request_timeout.setter
162 def single_request_timeout(self, value):
163     """The timeout (seconds) for a single HTTP REST API request."""
164     check_type(value, int, optional=True)
165     assert value is None or value > 0
166     self._single_request_timeout = value
167

```

C.

```

file: cat.py
160
161 @single_request_timeout.setter
162 def single_request_timeout(self, value):
163     """The timeout (seconds) for a single HTTP REST API request."""
164     check_type(value, int, optional=True)
165     if value is not None and value <= 0:
166         raise ValueError("single_request_timeout must be positive integer")
167     self._single_request_timeout = value
168
169

```

D.

```

file: fish.py
160
161 @single_request_timeout.setter
162 def single_request_timeout(self, value):
163     """The timeout (seconds) for a single HTTP REST API request."""
164     check_type(value, int, optional=True)
165     self._single_request_timeout = value

```

E.

```

file: cat.py
172
173 @single_request_timeout.setter
174 def single_request_timeout(self, value):
175     """The timeout (seconds) for a single HTTP REST API request."""
176     check_type(value, int, optional=True)
177     if value is not None and value <= 0:
178         raise ValueError("single_request_timeout must be positive integer")
179     self._single_request_timeout = value
180

```

- F. Option A
- G. Option B
- H. Option C
- I. Option D
- J. Option E

Answer: BC

**NEW QUESTION 175**

- (Exam Topic 1)

What are two security benefits of a Docker-based application?

- A. easier to patch because Docker containers include only dependencies that the application requires
- B. prevents information leakage that can occur when unhandled exceptions are returned in HTTP responses

- C. allows for separation of application that traditionally run in the same host
- D. natively secures access to secrets that are used by the running application
- E. guarantees container images are secured and free of vulnerabilities

**Answer:** AC

**NEW QUESTION 179**

- (Exam Topic 1)

Refer to the exhibit.

```
def process_devices(dnac, token):
    url = "https://{}/api/v1/network-device".format(dnac['host'])
    headers["x-auth-token"] = token
    response = requests.get(url, headers=headers, verify=False)
    data = response.json()
    for item in data['response']:
        print(item["hostname"], " ", item["managementIpAddress"])
```

What is the function of the python script?

- A. Count and print the total number of available devices.
- B. Iterate over a list of network devices and write all device names and management IP addresses to an output file.
- C. Iterate over a list of network devices and write all device type and associated management IP address.
- D. For each device that is returned, display the device and, for each device, print the device name and management IP address.
- E. Loop through the returned list of network devices and, for each device, print the device name management IP address.

**Answer:** E

**NEW QUESTION 183**

- (Exam Topic 1)

Which response status code is used by a RESTful interface to indicate successful execution of a request?

- A. 200
- B. 404
- C. 405
- D. 500

**Answer:** A

**NEW QUESTION 184**

- (Exam Topic 1)

How does requesting a synchronous API operation differ from requesting an asynchronous API operation?

- A. clients poll for the status of the execution of operations
- B. clients subscribe to a webhook for operation results
- C. clients can access the results immediately
- D. clients receive responses with a task id for further processing

**Answer:** C

**NEW QUESTION 187**

- (Exam Topic 1)

Drag and Drop the GIT commands from the left onto the right that add modified local files to a remote repository. Not all options are used

git push	Git command one
git add .	Git command two
git checkout -b "new branch"	Git command three
git commit -m "this is my edit"	
git pull	

- A. Mastered
- B. Not Mastered

**Answer:** A

**Explanation:**

```
git add .  
git commit -m "this is my edit" git push
```

#### NEW QUESTION 192

- (Exam Topic 1)

Which two query types does a client make to a DNS server? (Choose Two)

- A. AAAA
- B. ACK
- C. DISCOVER
- D. Inverse
- E. PTR

**Answer:** AE

#### NEW QUESTION 197

- (Exam Topic 1)

What is the purpose of a MAC address?

- A. To uniquely identify a router in a LAN
- B. To uniquely identify a network interface in a LAN
- C. To uniquely identify a device on the internet
- D. To uniquely identify a switch in a LAN

**Answer:** B

#### NEW QUESTION 200

- (Exam Topic 1)

An automation script fails to connect to an internal server exactly 1 out of 2 times it is executed. This behavior is seen from different clients. Which networking device must be at fault?

- A. Laptop on which the script is running
- B. Router
- C. Switch
- D. Load balancer

**Answer:** D

#### NEW QUESTION 205

- (Exam Topic 1)

Which principle is a value from the manifesto for Agile software development?

- A. adhering to a plan over responding to requirements
- B. detailed documentation over working software
- C. processes and tools over teams and interactions
- D. customer collaboration over contract negotiation

**Answer:** D

#### Explanation:

Reference: [https://www.cisco.com/c/dam/global/en\\_hk/solutions/collaboration/files/agile\\_product\\_development.pdf](https://www.cisco.com/c/dam/global/en_hk/solutions/collaboration/files/agile_product_development.pdf)

#### NEW QUESTION 207

- (Exam Topic 1)

Which two concepts describe test-driven development? (Choose two.)

- A. It enables code refactoring.
- B. Write a test before writing code.
- C. Implementation is driven by incremental testing of release candidates.
- D. User acceptance testers development the test requirements.
- E. Tests are created when code is ready for release.

**Answer:** BC

#### Explanation:

[https://www.tutorialspoint.com/software\\_testing\\_dictionary/release\\_candidate.htm](https://www.tutorialspoint.com/software_testing_dictionary/release_candidate.htm)

#### NEW QUESTION 210

- (Exam Topic 1)

Which two items are Cisco DevNet resources? (Choose two.)

- A. TAC support
- B. Bitbucket
- C. Sandbox
- D. Software research
- E. API Documentation

**Answer:** CE

**Explanation:**

Reference: <https://developer.cisco.com/>

**NEW QUESTION 214**

- (Exam Topic 1)

Which description of a default gateway is true?

- A. It is a device that receives IP packets that have no explicit next-hop in the routing table.
- B. It is a feature that translates between public and private addresses.
- C. It is a security feature that denies certain traffic.
- D. It is a device that receives Layer 2 frames with an unknown destination address.

**Answer:** A

**Explanation:**

Refe

<https://www.certificationkits.com/cisco-certification/ccna-articles/cisco-ccna-intro-to-routing-basics/cisco-ccna>

**NEW QUESTION 217**

- (Exam Topic 1)

What operation is performed with YANG model-driven programmability in NX-OS?

- A. configure a device with native and OpenConfig-based models
- B. send CLI commands to a device and retrieve output in JSON format
- C. run Linux commands natively on the device
- D. bootstrap a device that has a factory-default configuration

**Answer:** A

**Explanation:**

Reference:

<https://www.cisco.com/c/en/us/products/collateral/switches/nexus-9000-series-switches/white-paper-c11-74151>

**NEW QUESTION 221**

- (Exam Topic 1)

Which model-driven programmability protocol does Cisco IOS XE Software support?

- A. CORBA
- B. SSH
- C. gNMI
- D. SOAP

**Answer:** C

**Explanation:**

Reference:

[https://www.cisco.com/c/en/us/td/docs/ios-xml/ios/prog/configuration/1610/b\\_1610\\_programmability\\_cg/gnmi\\_](https://www.cisco.com/c/en/us/td/docs/ios-xml/ios/prog/configuration/1610/b_1610_programmability_cg/gnmi_)

**NEW QUESTION 223**

- (Exam Topic 1)

Which network device monitors incoming and outgoing traffic and decides whether to allow or block specific traffic based on a defined set of rules?

- A. switch
- B. load balancer
- C. reverse proxy
- D. firewall

**Answer:** D

**NEW QUESTION 228**

- (Exam Topic 1)

What is a tenet of test-driven development?

- A. write documentation for tests
- B. write tests after adding new blocks of code
- C. write and run tests before writing new code
- D. run tests after writing new code

**Answer:** C

**NEW QUESTION 230**

- (Exam Topic 1)

What are two advantages of YANG-based approaches for infrastructure automation? (Choose two.)

- A. directly maps to JavaScript
- B. multi-platform vendor abstraction
- C. designed to reflect networking concepts
- D. compiles to executables that run on network devices
- E. command line driven interface

Answer: BC

**NEW QUESTION 231**

- (Exam Topic 1)

A function my\_func() returns True when it executes normally. Which python snippet tests my\_func()?

- ```
def test_func(self):
    self.assertTrue(my_func())
```
- ```
def test_func(self):
    self.assertRaises(my_func())
```
- ```
def test_func(self):
    self.assertEqual(my_func(), '{true}')
```
- ```
def test_func(self):
    self.assertFalse(my_func())
```

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

Answer: B

**NEW QUESTION 235**

- (Exam Topic 1)

Which two types of NAT are used in a network? (Choose two.)

- A. Static NAT
- B. Normal NAT
- C. Multicast NAT
- D. Dynamic NAT
- E. Router NAT

Answer: AD

**Explanation:**

Reference: <https://www.dummies.com/programming/networking/cisco/types-of-network-address-translation/>

**NEW QUESTION 236**

- (Exam Topic 1)

In python, which expression checks whether the script returns a success status code when the Requests library is used?

- A. response.status\_code== requests.ok
- B. response.status\_code== requests.codes.ok
- C. response.code== requests.codes.ok
- D. response.status\_code != requests.codes.ok

Answer: B

**Explanation:**

Reference: <https://realpython.com/python-requests/>

**NEW QUESTION 239**

- (Exam Topic 1)

Fill in the blanks to complete the Bash script in which each file in a directory is renamed to its SHA256 hash?

```
TARGET_DIR=/usr/local/certs
for f in [ ] [ ] ; do
    [ ] `openssl sha -sha256 -r < $f | cut -f1 -d' '`
done
```

- A. Mastered
- B. Not Mastered

**Answer:** A

**Explanation:**

Check below the answer exact.

```
TARGET_DIR=/usr/local/certs
for f in $(ls $TARGET_DIR); do
mv $f $(openssl sha -sha256 -r < $f | cut -f1 -d' ')
done
```

**NEW QUESTION 241**

- (Exam Topic 1)

When a Cisco IOS XE networking device is configured using RESTCONF, what is the default data-encoding method?

- A. XML
- B. x-form-encoding
- C. YANG
- D. YAML

**Answer:** A

**NEW QUESTION 246**

- (Exam Topic 1)

Which task is performed because the test-driven development approach is being used?

- A. testing existing software before developing new code
- B. refactoring code that is covered by existing tests
- C. writing code without committing any coding violations
- D. creating test scenarios based on continuous development

**Answer:** B

**Explanation:**

"The idea is that you build a test case first, before any software has been created or modified" but "testing existing software before developing new code" is the idea or goal, not the task five steps of TDD:

- Write a test
- Test fails
- Write some code
- Test passes
- Refactor

**NEW QUESTION 250**

- (Exam Topic 1)

Refer to the exhibit.

**HTTP REQUEST**

**POST** /organizations/{organizationId}/networks

**PARAMETERS**

**name**  
The name of the new network

---

**type**  
The type of the new network. Valid types are wireless, appliance, switch, systemsManager, camera, cellularGateway, or a space-separated list of those for a combined network.

---

**tags**  
A space-separated list of tags to be applied to the network

---

**timeZone**  
The timezone of the network. For a list of allowed timezones, please see the 'TZ' column in the table in [this article](#).

---

**copyFromNetworkId**  
The ID of the network to copy configuration from. Other provided parameters will override the copied configuration, except type which must match this network's type exactly.

---

**disableMyMerakiCom**  
Disables the local device status pages (my.meraki.com, ap.meraki.com, switch.meraki.com, wired.meraki.com). Optional (defaults to false)

---

**disableRemoteStatusPage**  
Disables access to the device status page (http://[device's LAN IP]). Optional. Can only be set if

Drag and Drop the code from the bottom onto the box where the code is missing on the Meraki Python script to create a new network

```
base_url = "https://api.meraki.com/api/v0"
org_id = "123456789"
api_key = "1098hadpfsiapf8ahf8ohp"
network_name = "New Network"
requests.post(
    base_url + "/" + [ ] + "/" + [ ] + "/networks",
    [ ] = {
        "X-Cisco-Meraki-API-Key": [ ],
        "Content-Type": "application/json"
    },
    data=json.dumps({"[ ]": network_name,
                    "type": "wireless switch"
                    }))
```

organizations      headers

api\_key              org\_id

name

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

```
base_url = "https://api.meraki.com/api/v0"
org_id = "123456789"
api_key = "1098hadpfsiapsf8ahf8ohp"
network_name = "New Network"
requests.post(
    base_url + "/" + organizations + "/" + org_id + "/networks",
    headers = {
        "X-Cisco-Meraki-API-Key": api_key,
        "Content-Type": "application/json"
    },
    data=json.dumps({
        "name": network_name,
        "type": "wireless switch"
    })
)
```

**NEW QUESTION 251**

- (Exam Topic 1)

What are the two purposes for using a VLAN in a network? (Choose two)

- A. It is used to create the routing table.
- B. It creates a collection of MAC addresses.
- C. It is used for VM network traffic.
- D. It segments a network.
- E. It creates a broadcast domain.

Answer: DE

**NEW QUESTION 254**

- (Exam Topic 1)

Drag and drop elements of the RESTCONF protocol stack from the left onto the correct description on the right. Not all elements on the left are used.

<data>	content
XML or JSON	operations
SSH	transport
<rpc>, <rpc-reply>	
GET, POST, PUT, PATCH, DELETE	
HTTPS	

- A. Mastered
- B. Not Mastered

Answer: A

**Explanation:**

1 – B, 2 – E, 3 - F

Reference:

[https://www.cisco.com/c/en/us/td/docs/ios-xml/ios/prog/configuration/169/b\\_169\\_programmability\\_cg/restconf](https://www.cisco.com/c/en/us/td/docs/ios-xml/ios/prog/configuration/169/b_169_programmability_cg/restconf)

**NEW QUESTION 255**

- (Exam Topic 1)

Refer to the exhibit.

```
#!/bin/bash
<item 1>='date +%b-%d-%y'

<item 2>=/home/usr/path/backup-$BACKUPTIME.tar.gz

<item 3>=/home/usr/path/data_folder

tar -cpzf $DESTINATION $SOURCEFOLDER
```

Drag and drop the variables from the left onto the item numbers on the right that match the missing assignments in the exhibit.

BACKUPTIME	<item 1>
SOURCEFOLDER	<item 2>
DESTINATION	<item 3>

- A. Mastered
- B. Not Mastered

Answer: A

**Explanation:**

1 – A, 2 – C, 3 – B

Reference: <https://medium.com/@fotios.floros/linux-backup-script-1722cc9c2bf6> (use tar in order to create your backup file)

**NEW QUESTION 259**

- (Exam Topic 1)

Which product provides network controller-level management features?

- A. Cisco DNA Center
- B. Cisco NX-OS
- C. Cisco UCS Manager
- D. Cisco ISE

Answer: A

**Explanation:**

Reference: <https://www.cisco.com/c/en/us/products/cloud-systems-management/index.html>

**NEW QUESTION 264**

- (Exam Topic 1)

What is the Git command to delete a local branch named "experiment" without a warning?

- A. git branch -n experiment
- B. git branch -rm experiment
- C. git branch -f experiment
- D. git branch -D experiment

Answer: D

**Explanation:**

Reference: <https://www.atlassian.com/git/tutorials/using-branches>

**NEW QUESTION 268**

- (Exam Topic 1)

Fill in the blanks to complete the statement.

Cisco DNA provide the capability to send an HTTP \_\_\_\_\_ request to the API endpoint [https://DNA-c\\_API\\_ADDRESS/api/vi/network-device/](https://DNA-c_API_ADDRESS/api/vi/network-device/) and receive the network \_\_\_\_\_ list in \_\_\_\_\_ format.

- A. Mastered
- B. Not Mastered

Answer: A

**Explanation:**

Solution below as

Cisco DNA Center provides the capability to send an HTTP GET request to the API endpoint `https://DNA-C_API_ADDRESS/api/v1/network-device/` and receive the network device list in JSON format

**NEW QUESTION 270**

- (Exam Topic 1)

Drag and drop the descriptions from the left onto correct application deployment models on the right.

provides a low-latency compute capability close to the data source	<b>Public Cloud</b> <div style="border: 1px solid black; height: 20px; margin-bottom: 5px;"></div> <div style="border: 1px solid black; height: 20px; margin-bottom: 5px;"></div>
environment where you pay only for the resources that you consume	
offers a self-service, elastic compute environment from a dedicated set of physical resources	
provides an approach for overflow traffic to burst out to meet peak demands	
shared compute platform that is offered over the Internet	
	<b>Private Cloud</b> <div style="border: 1px solid black; height: 20px; margin-bottom: 5px;"></div>
	<b>Hybrid Cloud</b> <div style="border: 1px solid black; height: 20px; margin-bottom: 5px;"></div>
	<b>Edge Computing</b> <div style="border: 1px solid black; height: 20px; margin-bottom: 5px;"></div>

- A. Mastered
- B. Not Mastered

**Answer:** A

**Explanation:**

1 – B, 2 – E, 3 – C, 4 – D, 5 – A

**NEW QUESTION 274**

- (Exam Topic 1)

Which platform is run directly using a hypervisor?

- A. bare metal systems
- B. containers
- C. virtual machines
- D. applications

**Answer:** C

**NEW QUESTION 278**

- (Exam Topic 1)

Which detail is included in a routing table?

- A. IP protocol
- B. Broadcast address
- C. TCP or UDP port number
- D. Destination next hop or outgoing interface

**Answer:** D

**Explanation:**

Reference: <https://geek-university.com/ccna/routing-table-explained/>

**NEW QUESTION 279**

- (Exam Topic 1)

A 401 HTTP response code is returned when calling a REST API. What is the error state identified by this response code?

- A. The server cannot process the request as it has detected an issue in the request syntax or body.
- B. The server accepted the request but the client is not authorized for this content.
- C. The request has not been accepted because it requires authentication.
- D. The server cannot find the requested resource because the path specified is incorrect.

Answer: C

**Explanation:**

Reference:

<https://blog.restcase.com/rest-api-error-codes-101/#:~:text=A%20401%20error%20response%20indicates,crede>

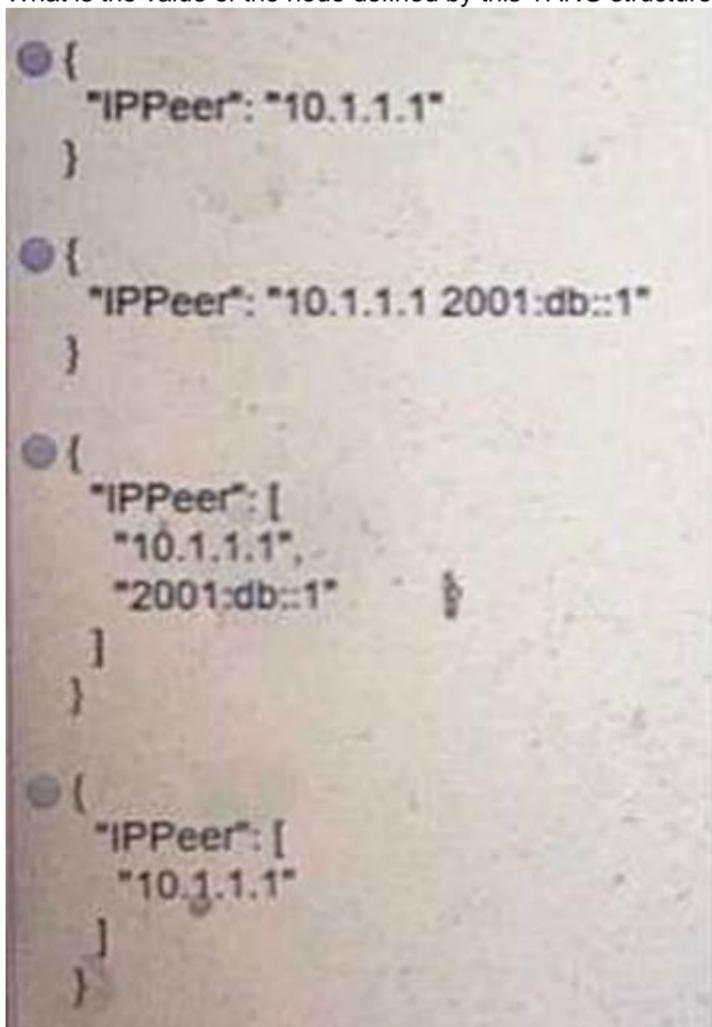
**NEW QUESTION 284**

- (Exam Topic 1)

Refer to the exhibit.

```
leaf IPPeer {
  type union {
    type inet:ipv4-address;
    type inet:ipv6-address;
  }
}
```

What is the value of the node defined by this YANG structure?



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

Answer: D

**Explanation:**

<https://tools.ietf.org/html/rfc7950#section-9.12>

**NEW QUESTION 288**

- (Exam Topic 1)

On which port does NETCONF operate by default?

- A. 23
- B. 443
- C. 822
- D. 830

Answer: D

**NEW QUESTION 293**

- (Exam Topic 1)

A developer is reviewing a code that was written by a colleague. It runs fine, but there are many lines of code to do a seemingly simple task repeatedly. Which action organizes the code?

- A. Refactor the code by removing any unnecessary tests
- B. Using functions, rewrite any pieces of code that are repeated
- C. Reverse engineer and rewrite the code logic
- D. Modify the code to use loops

**Answer: B**

**NEW QUESTION 294**

- (Exam Topic 1)

What are two roles of an artifact repository in a CI/CD pipeline? (Choose two.)

- A. is required for CI/CD pipelines executed on a public cloud infrastructure
- B. is required for managing open source software
- C. stores files needed and generated during the build process
- D. allows for comparing and merging changes in the source code
- E. provides traceability, search, and management of binary files

**Answer: CE**

**NEW QUESTION 297**

- (Exam Topic 1)

Package updates from a local server fail to download. However, the same updates work when a much slower external repository is used. Why are local updates failing?

- A. The update utility is trying to use a proxy to access the internal resource.
- B. The Internet connection is too slow.
- C. The Internet is down at the moment, which causes the local server to not be able to respond.
- D. The server is running out of disk space.

**Answer: A**

**NEW QUESTION 299**

- (Exam Topic 1)

Refer to the exhibit.

```

$ pyang -f tree Cisco-IOS-XE-native.yang
module: Cisco-IOS-XE-native
  +--rw native
    +--rw logging
      +--rw monitor|
        +--rw severity? logging-level-type

$ curl --insecure -v -X PATCH \
  "https://ios-xe-mgmt-latest.cisco.com:9443/restconf/data/Cisco-IOS-XE-native:native" \
  -H 'Authorization: Basic ZGV2ZWxvcGVyOkMxc2NvMTIzNDU=' -H 'Accept: application/yang-data+json' \
  -H 'Content-Type: application/yang-data+json' \
  -d '{ "Cisco-IOS-XE-native:native" : { "logging" : { "monitor" : { "severity" : "alerts" } } } }'
> ...
< ...
< HTTP/1.1 204 No Content

```

The definition of the YANG module and a RESTCONF query sent to a Cisco Ioc XE device is shown. Which statement is correct if the RESTCONF interface responds with a 204 status code?

- A. The query failed at retrieving the logging seventy level.
- B. The query failed to set the logging seventy level due to an invalid path.
- C. The query retrieved the logging seventy level.
- D. The query updated the logging seventy level or created it if not present on the device.

**Answer: D**

**Explanation:**

Reference:

[https://www.cisco.com/c/en/us/td/docs/ios-xml/ios/prog/configuration/1611/b\\_1611\\_programmability\\_cg/restco](https://www.cisco.com/c/en/us/td/docs/ios-xml/ios/prog/configuration/1611/b_1611_programmability_cg/restco)

**NEW QUESTION 304**

- (Exam Topic 1)

A REST API service requires authentication based on the username and password. The user "john" has the password "384279060" and the Base64 encoding of those credentials is "am9objowMTIzNDU2Nzg=". Which method completes an authentication request?

- A. The header must include: Authorization: Bearer am9objowMTIzNDU2Nzg=
- B. The payload must include: Authorization: Bearer am9objowMTIzNDU2Nzg=
- C. The payload must include: Authorization: Basic am9objowMTIzNDU2Nzg=
- D. The header must include: Authorization: Basic am9objowMTIzNDU2Nzg=

**Answer: D**

**NEW QUESTION 309**

- (Exam Topic 1)

Refer to the exhibit.

```

---
- hosts: switch2960cx
  gather_facts: no

  tasks:
    - ios_l2_interface:
      name: GigabitEthernet0/1
      state: unconfigured

    - ios_l2_interface:
      name: GigabitEthernet0/1
      mode: trunk
      native_vlan: 1
      trunk_allowed_vlans: 6-8
      state: present

    - ios_vlan:
      vlan_id: 6
      name: guest-vlan
      interfaces:
        - GigabitEthernet0/2
        - GigabitEthernet0/3

    - ios_vlan:
      vlan_id: 7
      name: corporate-vlan
      interfaces:
        - GigabitEthernet0/4

    - ios_vlan:
      vlan_id: 8
      name: iot-vlan
      interfaces:
        - GigabitEthernet0/5

```

Which two statements describe the configuration of the Ansible script if run? (Choose two.)

- A. Traffic on port 0/2 and 0/3 is connected to port 0/6.
- B. Traffic from ports 0/2 to 0/5 can flow on port 0/1 due to the trunk.
- C. Traffic can flow between ports 0/2 to 0/5 due to the trunk on port 0/1.
- D. GigabitEthernet0/2 and GigabitEthernet0/3 are access ports for VLAN 6.
- E. GigabitEthernet0/1 is left unconfigured.

**Answer:** BD

**NEW QUESTION 311**

- (Exam Topic 1)

What are the two principles of an infrastructure as code environment? (Choose two)

- A. Complete complex systems must be able to be built from reusable infrastructure definitions.
- B. Environments must be provisioned consistently using the same inputs.
- C. Redeployments cause varying environment definitions.
- D. Service overlap is encouraged to cater for unique environment needs.
- E. Components are coupled, and definitions must be deployed for the environment to function.

**Answer:** AB

**NEW QUESTION 314**

- (Exam Topic 3)

Drag and drop the code from the bottom onto the box where the code is missing to authenticate with the Cisco DNA Center REST API by using basic authentication. Then generate a token for later use. Not all options are used.

```
import requests
from requests.auth import HTTPBasicAuth

BASE_URL = 'https://sandboxnac2.cisco.com'
AUTH_URL = '/dna/system/api/v1/ [ ] '
USERNAME = 'admin'
PASSWORD = 'qwer1234!'

response = requests. [ ] (BASE_URL + AUTH_URL,
    auth=HTTPBasicAuth([ ], [ ]))
token = response.json()['Token']
print(token)
```

auth/basic	/auth/token	post	get
USERNAME	Token	PASSWORD	

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

```
import requests
from requests.auth import HTTPBasicAuth

BASE_URL = 'https://sandboxnac2.cisco.com'
AUTH_URL = '/dna/system/api/v1/ /auth/token '
USERNAME = 'admin'
PASSWORD = 'qwer1234!'

response = requests. post (BASE_URL + AUTH_URL,
    auth=HTTPBasicAuth( USERNAME , PASSWORD ))
token = response.json()['Token']
print(token)
```

auth/basic	/auth/token	post	get
USERNAME	Token	PASSWORD	

**NEW QUESTION 318**

- (Exam Topic 3)  
 When a Cisco IOS XE networking device is configured by using RESTCONF, what is the default data encoding method?

- A. application/yaml-data+json
- B. application/yang-data+json
- C. application/xml-data+json
- D. application/json-data+xml

Answer: D

**NEW QUESTION 322**

- (Exam Topic 3)  
 What is a characteristic of RPC APIs compared to REST APIs?

- A. Authentication is done over provisions for the service caller and vice versa for RPC API, and REST API uses HTTP headers for authentication.
- B. All communications between the client and server must be stateless for RPC API, and REST API is stateful.

- C. The architecture model for RPC API is resource-focused, and REST API is procedure-focused.
- D. The data payload must be in JSON format for RPC API, and REST API allows JSON and XML formats.

Answer: A

**NEW QUESTION 326**

- (Exam Topic 3)

An engineer must make changes on a network device through the management platform API. The engineer prepares a script to send the request and analyze the response, check headers, and read the body according to information inside response headers. Drag and drop the HTTP header values from the left onto the elements of an HTTP response on the right.

16974	cache-control
no-store, must-revalidate	content-length
timeout=5, max=100	keep-alive
application/json;charset=UTF-8	content-type

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

16974	no-store, must-revalidate
no-store, must-revalidate	16974
timeout=5, max=100	timeout=5, max=100
application/json;charset=UTF-8	application/json;charset=UTF-8

**NEW QUESTION 329**

- (Exam Topic 3)

What is a characteristic of Waterfall compared to Agile software development method?

- A. Waterfall focuses on continuous improvement, and Agile focuses on the design phase.
- B. Waterfall separates the project development lifecycle into sprints, and Agile does not use cycles.
- C. Waterfall specifies requirements before development begins, and Agile responds flexibly to changes in requirements.
- D. Waterfall uses reviews with step by step approach, and Agile uses a serially phased approach.

Answer: C

**NEW QUESTION 333**

- (Exam Topic 3)

A file in a local Git repository has been updated and issued the git add . command. The git diff command has been run to compare the changes to the previous commit, but nothing shows. Which action identifies the problem?

- A. Run the git add . command again in the correct subdirectory to ensure changes added to the staging area.
- B. Run the git commit command before the differences are compared to receive the end state of the code.
- C. Run the git status command to see the differences between current and previous code review stages.
- D. Run the git diff --staged command to compare the code added to the staging area.

Answer: D

**NEW QUESTION 337**

- (Exam Topic 3)

```
user@host1:~/tmp$ cat Dockerfile
# Dockerfile to install traceroute
FROM ubuntu
MAINTAINER User One (userone@cisco.com)
RUN apt-get update && apt-get install traceroute
```

Refer to the exhibit. Drag and drop the Dockerfile contents from the left onto the functions on the right that create a container image to run traceroute to track network path to specific targets. Not all options are used.

document author	FROM ubuntu
command to execute	MAINTAINER User One (userone@cisco.com)
initializes a new build stage	RUN apt-get update && apt-get install traceroute
copies new files or directories	
sets the userid	

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

document author	initializes a new build stage
command to execute	document author
initializes a new build stage	command to execute
copies new files or directories	
sets the userid	

**NEW QUESTION 339**

- (Exam Topic 3)

A developer has experienced security issues with a previously developed application. The API offered by that application is open and without any constraints. During a recent attack, the application was overloaded with API requests. To address this issue, an API constraint is implemented to protect the application from future attacks or any sudden throttling. Which API constraint must the application developer implement in this situation?

- A. pagination
- B. rate limiting
- C. filtering
- D. payload limiting

Answer: B

**NEW QUESTION 343**

- (Exam Topic 3)

A developer is running an application that connects to the Cisco website and collects data. The application will be hosted in a local data center and the data will

need to be collected on a frequent basis. The application client requires certain environmental variables to be set before the run. Which Bash command sets the environmental variables for a Linux system?

- A. `"cisco.com"=WEBSITE`
- B. `export lvar=23`
- C. `WEBSITE="cisco.com"`
- D. `export website="cisco.com"`

Answer: D

**NEW QUESTION 347**

- (Exam Topic 3)

Drag and drop the capabilities from the left onto the Cisco Network Management Platforms that support the capabilities on the right.

receives AI/ML network performance insights, and uses guided issue remediation	Meraki
achieves automation through common policy for data center operations	Cisco DNA Center
establishes an overlay fabric to connect data centers, branches, and campuses through vManage	ACI
provisions and manages networks, networking devices, and clients through a fully managed cloud service	Cisco SD-WAN
supports multivendor networks through Network Element Drivers	NSO

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

receives AI/ML network performance insights, and uses guided issue remediation	provisions and manages networks, networking devices, and clients through a fully managed cloud service
achieves automation through common policy for data center operations	receives AI/ML network performance insights, and uses guided issue remediation
establishes an overlay fabric to connect data centers, branches, and campuses through vManage	achieves automation through common policy for data center operations
provisions and manages networks, networking devices, and clients through a fully managed cloud service	establishes an overlay fabric to connect data centers, branches, and campuses through vManage
supports multivendor networks through Network Element Drivers	supports multivendor networks through Network Element Drivers

**NEW QUESTION 352**

- (Exam Topic 3)

What is the purpose of running tests before writing code in test-driven development?

- A. to find unexpected failures in the tests
- B. to demonstrate that the tests fail for expected reasons
- C. to ensure that the tests pass

D. to provide proof of the work carried out

Answer: D

**NEW QUESTION 357**

- (Exam Topic 3)

Drag and drop characteristics from the left onto the infrastructure management methodologies on the right.

exposes RESTCONF as Northbound API	Device Level
uses REST as Northbound API	
supported by standards such as YANG models	Controller Level
integrates to ITSM tools using Westbound APIs	

- A. Mastered
- B. Not Mastered

Answer: A

**Explanation:**

exposes RESTCONF as Northbound API	Device Level
uses REST as Northbound API	supported by standards such as YANG models
supported by standards such as YANG models	Controller Level
integrates to ITSM tools using Westbound APIs	uses REST as Northbound API
	integrates to ITSM tools using Westbound APIs

**NEW QUESTION 362**

- (Exam Topic 3)

A team of developers is responsible for a network orchestration application in the company. The responsibilities also include: developing and improving the application in a continuous manner deployment of the application and management of CI/CD frameworks monitoring the usage and problems and managing the performance improvements Which principle best describes this DevOps practice?

- A. responsible for IT operations
- B. automation of processes
- C. end-to-end responsibility
- D. quality assurance checks

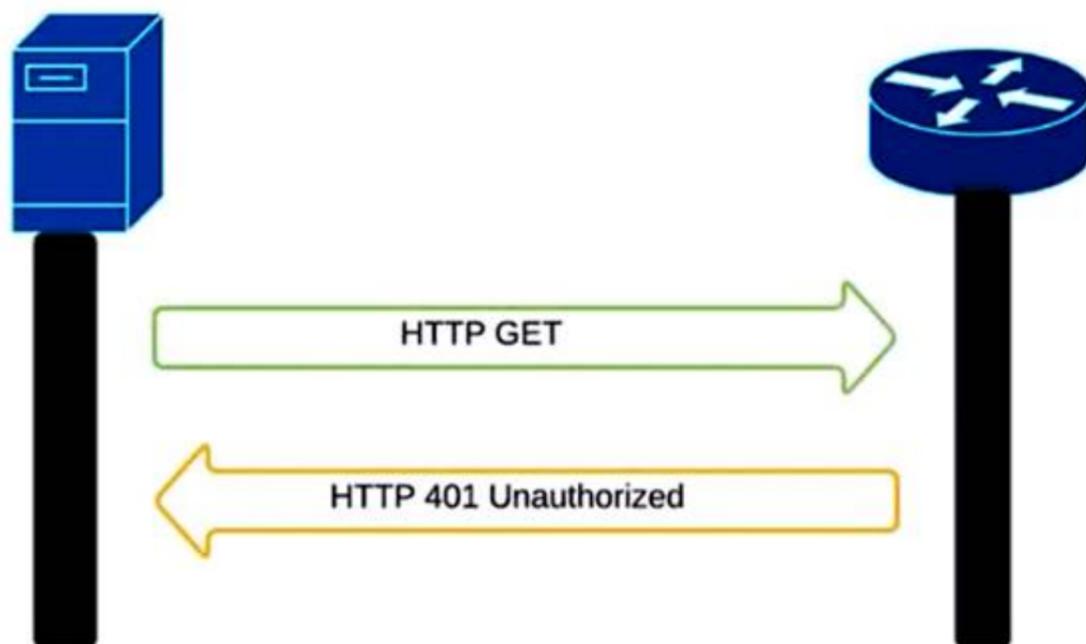
Answer: C

**NEW QUESTION 367**

- (Exam Topic 3)

Refer to the exhibit.

```
curl -i -k -X 'GET' 'https://172.18.110.64:443/restconf/data/Cisco-IOS-XE-native:native/hostname'
-H 'Accept: application/yang-data+json' \
-u 'cisco:cisco'
```



An administrator attempts to perform a GET operation by using the Cisco IOS XE RESTCONF API to return the hostname of a device. The sequence diagram in the exhibit illustrates the HTTP messages observed. Which change to the API request resolves the issue?

- A. Remove the -H 'Accept: application/yang-data+json' header.
- B. Replace -u cisco:cisco parameter with -u 'cisco:cisco'.
- C. Change the request method from -X 'GET' to -X 'POST'.
- D. Add the -H 'Content-Type: application/yang-data+json' header.

**Answer: B**

**NEW QUESTION 369**

- (Exam Topic 3)

```
import requests, json
url = https://sandboxnac.cisco.com:443/dna/intent/api/v1/3daa70bdcd5b
headers = {
    'x-auth-token': 'eyJhbGc ... yJbN8',
    'Content-Type': 'application/json',
}
payload = {
    "settings": {
        "dhcpServer": ["172.30.200.5"],
        "dnsServer": {
            "domainName": "devnet.local",
            "primaryIpAddress": "172.30.200.6",
            "secondaryIpAddress": "172.30.200.7"},
        "syslogServer": {"ipAddresses": ["10.255.0.1"], "configureDnacIP": True}
    }
}
response = requests.request('POST', url, headers=headers, data=payload)
print(response.status_code)
```

Refer to the exhibit. A developer writes a script to create a new network by using the Cisco DNA Center API. After running the script for the first time, the developer observes that HTTP code 404 is printed to the console. Which action resolves the problem?

- A. The x-auth-token value must be changed to a valid token.
- B. The API URL must be changed with a valid URL.
- C. The requested payload must be fixed to include missing parts.
- D. Internal errors on the code of API server must be fixed.

**Answer: B**

**NEW QUESTION 370**

- (Exam Topic 3)

A business needs to create a simulated environment that mimics a production infrastructure to make changes to the OSPF process and analyze the impact. What should be used?

- A. Cisco VIRL / Cisco CML
- B. Cisco DevNet Sandbox labs
- C. pyATS
- D. Puppet

**Answer: A**

**Explanation:**

<https://www.cisco.com/c/en/us/products/cloud-systems-management/modeling-labs/index.html>

**NEW QUESTION 374**

- (Exam Topic 3)

Which IP service synchronizes the time across devices?

- A. DNS
- B. NTP
- C. SNMP
- D. NAT

**Answer: B**

**NEW QUESTION 379**

- (Exam Topic 3)

Which command reverses the last commit without changing the index file or the working tree position?

- A. git revert HEAD
- B. git reset --hard HEAD~3
- C. git reset --soft HEAD^
- D. git revert

**Answer: C**

**NEW QUESTION 381**

- (Exam Topic 3)

What is a procedural component of CI/CD pipelines?

- A. Bundled artifacts must be generated.
- B. Every test must pass for the pipeline to continue its execution.
- C. Some tests fail without stopping the pipeline execution.
- D. The release label that identifies the build is optional.

**Answer: B**

**Explanation:**

In a CI/CD (Continuous Integration/Continuous Deployment) pipeline, a procedural component is a specific step or action that is carried out in a specific order as part of the pipeline process. One of the procedural components of a CI/CD pipeline is that every test must pass in order for the pipeline to continue its execution. If any test fails, the pipeline will stop and the issue must be addressed before the pipeline can continue. This is an important procedural component of a CI/CD pipeline because it ensures that the code being deployed is of high quality and meets the necessary standards before it is released.

**NEW QUESTION 386**

- (Exam Topic 3)

```
---
param0: Workflow1
param1:
  list:
    - name: VLAN_ID
      value: '198'
param2: 0
```

Refer to the exhibit. The YAML shown contains an object "param0" that is equal to "Workflow1", a second object "param1" that contains an object called "list" which contains an array of two objects, "name" (equal to "VLAN\_ID") and "value" (equal to a text value "198"), and finally a third object "param2" that is equal to "0". What is the equivalent message in JSON data format?

- A. 

```
[
  "param0"="Workflow1";
  "param1"=
    "list"=
      [{"name"="VLAN_ID";
        "value"="198"}]
  "param2"=0
]
```

B.

```

{
  "param0": "Workflow1";
  "param1": {
    "list":
      [
        { "name": "VLAN_ID";
          "value": "198" }
      ]
  },
  "param2": 0
}

```

C.

```

{
  "param0": "Workflow1",
  "param1": {
    "list":
      (
        [ "name": "VLAN_ID",
          "value": "198" ]
      )
  },
  "param2": 0
}

```

D.

```

{
  "param0": "Workflow1",
  "param1": {
    "list":
      [
        { "name": "VLAN_ID",
          "value": "198" }
      ]
  },
  "param2": 0
}

```

Answer: D

#### NEW QUESTION 387

- (Exam Topic 3)

Users cannot access a webserver and after the traffic is captured, the capture tool shows an ICMP packet that reports "time exceeded in-transit". What is the cause of this webserver access issue?

- A. The large distance between the server and the users means that the packets require too much time to reach the destination.
- B. A router along the path is misrouting the packets in a wrong direction.
- C. A router along the path has the wrong time.
- D. The server is overloaded and the connection was not able to be processed in time.

Answer: B

#### NEW QUESTION 392

- (Exam Topic 3)

A developer is attempting to retrieve all the messages from a Cisco Webex space. The server responds by sending the first 1,000 messages. The developer must make additional requests to retrieve the rest of the messages. Which API constraint is described in this scenario?

- A. payload limiting
- B. throttling
- C. pagination
- D. rate limiting

Answer: C

#### Explanation:

<https://developer.atlassian.com/server/confluence/pagination-in-the-rest-api/>

#### NEW QUESTION 395

- (Exam Topic 3)

A developer creates a program in which an object maintains a list of classes based on the observer pattern. The classes are dependent on the object. Whenever the state of the object changes, it notifies the dependent classes directly through callbacks. Which advantage of the observer pattern offers minimum

dependencies and maximum flexibility between dependent objects or classes?

- A. tight coupling
- B. cohesion
- C. mediation
- D. loose coupling

Answer: D

**NEW QUESTION 400**

- (Exam Topic 3)

**CISCO SECURITY APIS**

Introduction

- API Workflow
  - GET 1.) Find all events where Malwar...
  - GET 2.) Find Endpoint Details for Rem...
  - PUT 3.) Nuke the Endpoint to Prevent...
  - GET 4.) Find samples in Threat Grid
  - GET 5.) Get all sample domains to an...
  - POST 6.) Check all domains against Inv...
  - GET 7.) For suspect domains get mor...
  - POST 8.) Enforce on bad Domains in U...
  - GET 9.) Research other Ransomware ...
  - POST Generate Authentication Token ...
  - POST 10.) Add custom intelligence Fee...
- NGFW
  - POST Generate Authentication Token
  - GET Access Policies
  - GET Access Rules
  - GET Access Rule Details
  - POST New Access Rule in Policy
  - POST New Bulk Access Rule in Policv

## Cisco Security APIs

The main goal of this collection to help the developer understand the various API capabilities of Cisco NG Malware Protection, Threat Grid, ISE and Umbrella. It will cover useful API features for each of the products and how to properly use them. Simple workflow is also included in the collection to *Collect* all the characteristics/signatures of the possible attack using AMP. *Validate* the collected intelligence with Threat Grid and Umbrella. *Deploy* the intelligence to the NGFW, Umbrella and ISE to protect and contain the threat.

---

## API Workflow

**GET 1.) Find all events where Malware Executed**

`https://amp.dcloud.cisco.com/v1/events?connector_guid[]=&event_type[]=1107296272`

Get a listing of all the events for a specific computer when the quarantine failed

PARAMS

Refer to the exhibit. Drag and drop the code from the bottom onto the box where the code is missing to construct a Python script that calls a REST API request. Not all options are used.

```

import requests
[ ] = "https://fmc-hostname/api/fmc_tid/v1/domain//tid/source"
payload = {
    "name": "Threat Grid Ransomware DNS",
    "delivery": "url",
    "uri": "https://panacea.threatgrid.com/api/v3/feeds"+
    "/ransomware-dns 2017-12-08.stix?api_key=",
    "refresh": 1440,
    "version": "1.0.0",
    "params": {
        "selfSignedServerCertificate": "true",
        "hostnameVerifier": "allow_all"
    },
    "property": {
        "ttl": 90,
        "publish": true,
        "action": "monitor"
    }
}
headers = {
    'X-auth-access-token': 'access_token', ' [ ] ': 'application/json'
}
response = requests. [ ] ("POST", url,
    headers=headers, data = [ ] )
print(response.text.encode('utf8'))
    
```

url

Encoding

base\_url

Content-Type

post

request

payload

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

```
import requests

url = "https://fmc-hostname/api/fmc_tid/v1/domain//tid/source"
payload = {
    "name": "Threat Grid Ransomware DNS",
    "delivery": "url",
    "uri": "https://panacea.threatgrid.com/api/v3/feeds"+
    "/ransomware-dns 2017-12-08.stix?api_key=",
    "refresh": 1440,
    "version": "1.0.0",
    "params": {
        "selfSignedServerCertificate": "true",
        "hostnameVerifier": "allow_all"
    },
    "property": {
        "ttl": 90,
        "publish": true,
        "action": "monitor"
    }
}
headers = {
    'X-auth-access-token': 'access_token', 'Content-Type': 'application/json'
}

response = requests.request("POST", url,
    headers=headers, data = base_url )
print(response.text.encode('utf8'))
```

url	Encoding	base_url	Content-Type	post
request	payload			

**NEW QUESTION 403**

- (Exam Topic 3)

**SDK Documentation:**

**OrganizationController:**  
 get\_organizations()  
 get\_network\_device(dict)

**DevicesController:**  
 get\_network\_devices(id)

**NetworksController:**  
 get\_organization\_networks(dict)

Refer to the exhibit. A script must output details of all the Cisco Meraki MS220-BP switches across all organizations and networks. Drag and drop the code snippets from the bottom onto the boxes in the code to complete the script. Not all options are used.

```

from meraki_sdk.meraki_sdk_client import MerakiSdkClient
from meraki_sdk.exceptions.api_exception import APIException

api_key = "API_KEY"
client = MerakiSdkClient(api_key)

for org in [redacted]:
    try:
        options = {"organization id": org["id"]}
        networks = [redacted]
        for network in networks:
            devices = [redacted]
            for device in devices:
                if device["model"] == "MS220-8P":
                    options = {"network id": network["id"], "serial": device["serial"]}
                    output = [redacted]
                    print(output)
            except APIException as e:
                pass

```

- client.organizations.get\_organizations():
- client.networks.get\_organization\_networks(api\_key)
- client.networks.get\_organization\_networks(options)
- client.devices.get\_network\_devices(network ["id"])
- client.devices.get\_network\_device(options=options)
- client\_devices.get\_network\_device(device ["model"])

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

```

from meraki_sdk.meraki_sdk_client import MerakiSdkClient
from meraki_sdk.exceptions.api_exception import APIException

api_key = "API_KEY"
client = MerakiSdkClient(api_key)

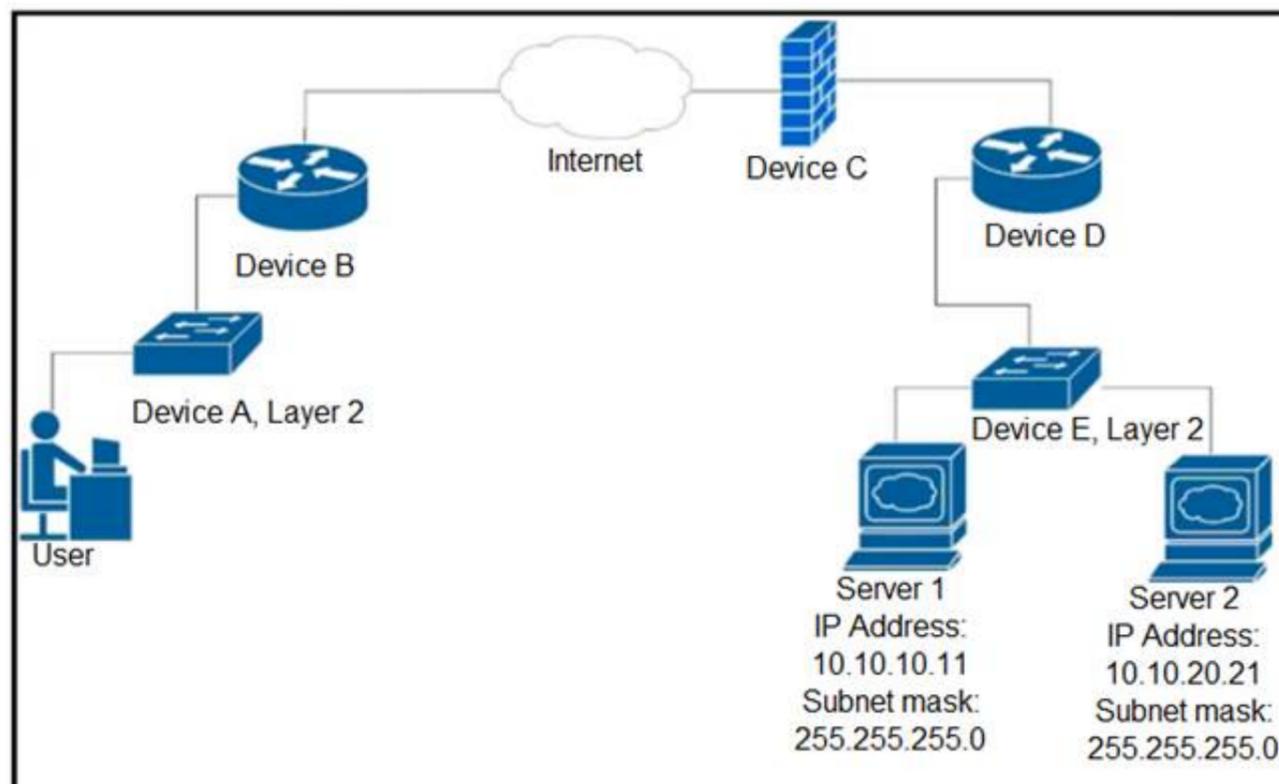
for org in [redacted]:
    try:
        options = {"organization id": org["id"]}
        networks = [client.networks.get_organization_networks(options)]
        for network in networks:
            devices = [client.devices.get_network_devices(network ["id"])]
            for device in devices:
                if device["model"] == "MS220-8P":
                    options = {"network id": network["id"], "serial": device["serial"]}
                    output = [client.devices.get_network_device(options=options)]
                    print(output)
            except APIException as e:
                pass

```

- client.organizations.get\_organizations():
- client.networks.get\_organization\_networks(api\_key)
- client.networks.get\_organization\_networks(options)
- client.devices.get\_network\_devices(network ["id"])
- client.devices.get\_network\_device(options=options)
- client\_devices.get\_network\_device(device ["model"])

**NEW QUESTION 405**

- (Exam Topic 3)  
 Refer to the exhibit.



Up to which device does the communication server 1 and server 2 go?

- A. device B
- B. device C
- C. device D
- D. device E

**Answer:** C

**NEW QUESTION 410**

- (Exam Topic 3)  
 Refer to the exhibit.

```

HTTP Request

curl http://hello-api.info -v

HTTP Response

* Trying hello-app.info...
* TCP_NODELAY set
* Connected to hello-app.info (hello-app.info) port 80 (#0)
> GET / HTTP/1.1
> Host:hello-app.info
> User-Agent: curl/7.64.1
> Accept: */*
>

< HTTP/1.1 502 Bad Gateway
< Server: nginx/1.14.0 (Ubuntu)
< Date: Sat, 21 Nov 2020 11:09:54 GMT
< Content-Type: text/html
< Content-Length: 182
< Connection: keep-alive
    
```

A developer cannot reach the web application behind an NGINX load balancer. The developer sends a request to an application FQDN with cURL but gets an HTTP 502 response. Which action solves the problem?

- A. Fix errors in the server configuration, which is behind the load balancer.
- B. Bring up the load balancer to the active state.
- C. Fix errors in the cURL request sent by the client.
- D. Change the default gateway on the load balancer to an active one.

**Answer:** A

**Explanation:**

The HyperText Transfer Protocol (HTTP) 502 Bad Gateway server error response code indicates that the server, while acting as a gateway or proxy, received an invalid response from the upstream server.

<https://developer.mozilla.org/en-US/docs/Web/HTTP/Status/502#:~:text=The%20HyperText%20Transfer%20P>

**NEW QUESTION 414**

- (Exam Topic 3)

What is a function of the default gateway in a network?

- A. to drop traffic that is destined to the default gateway
- B. to forward traffic to different subnets
- C. to forward traffic to the same subnet
- D. to drop traffic that is not destined to the default gateway

**Answer: B**

**NEW QUESTION 418**

- (Exam Topic 3)

Refer to the exhibit.

```
import requests

base_url = f"https://webexapis.com/v1/people"

headers = {
    "Accept": "application/json"
}

person_email = 'customer@company.com'
url = f"{base_url}?email={person_email}"

response = requests.request("GET", url, headers=headers)

if response.status_code == 200 :
    print(f"OK - Added {person_email}")
else:
    print(f"ERROR CODE {response.status_code}")
```

A collaboration engineer has developed a script to automate the gathering of information by providing the email address of the individual. When the engineer tests the script, a 401 error is received. Which command fixes the script?

- A. Add "Authorization": "Bearer <WEBEX\_TOKEN>" to the headers
- B. Add "Authentication": "Basic <WEBEX\_TOKEN>" in the base\_url after "https://".
- C. Add "<Authorization>:<password>@" in the base\_url after "https://".
- D. Add "Authentication": "Bearer <WEBEX\_TOKEN>" to the headers

**Answer: A**

**NEW QUESTION 420**

- (Exam Topic 3)

Refer to the exhibit.

```
git clone git://git.kernel.org/.../git.git my.git
cd my.git
git branch -d -r origin/todo origin/html origin/man (1)
git branch -D test (2)
```

What does the command marked (2) do when it is run?

- A. It duplicates the "test" branch.
- B. It deletes the "test" branch only if a new branch is created.
- C. It deletes the "test" branch.
- D. It does not delete the branch until it is merged.

**Answer: C**

**NEW QUESTION 424**

- (Exam Topic 3)

```

import requests
def main():
    def getCreds():
        user = input('User: ')
        pwd = Getpass('Pass: ')
        return (user,pwd)

    def login(ipaddr, user, pwd):
        url = "https://{ipaddr}/api/aaaLogin.json".format(ipaddr=ipaddr)
        data = '{"aaaUser":{"attributes":{"name":"{user}s","pwd":"{pwd}s"}}}'
        + '{"pwd":pwd,"user":user}'
        response = requests.post(url,data=data,verify=False)
        cookie = response.headers['Set-Cookie']
        return cookie

    def getstuff(ipaddr,cookie):
        headers = {"Cookie":cookie}
        url = "https://{ipaddr}/api/node/class/fvTenant.json".format(ipaddr=ipaddr)
        response = requests.get(url,headers=headers,verify=False)
        grouplist = []
        for x in response.json()["imdata"]:
            grouplist.append(x["fvTenant"]["attributes"]["name"])
        return ','.join(grouplist)

    ipaddr = "192.168.255.2"
    user,pwd = getCreds()
    token = login(ipaddr,user,pwd)
    return getstuff(ipaddr,cookie)

if __name__ == '__main__':
    result = main()
    print(result)

```

Refer to the exhibit. Which action does the script perform?

- A. It queries user credentials from Cisco IOS XE devices.
- B. It retrieves device identification from Cisco DNA Center.
- C. It exports SSID information from Meraki dashboard.
- D. It collects group information from ACI.

**Answer: D**

**NEW QUESTION 427**

- (Exam Topic 3)

Which port does HTTPS use by default?

- A. 433
- B. 443
- C. 803
- D. 883

**Answer: B**

**NEW QUESTION 431**

- (Exam Topic 3)

Which tool provides a testing environment to run tests on network devices and perform network automation scenarios?

- A. Visual Studio Code
- B. Cisco VIRL
- C. pyATS
- D. Cisco Packet Tracer

**Answer: B**

**NEW QUESTION 434**

- (Exam Topic 3)

```
api_endpoint = f"https://veryusefulapi/v2/authenticate"

headers = {
    "Authorization": "Basic YWRtaW46c3VwZXJzZWNyZXQ="
    "Accept": "application/json"
}

req = requests.get(api_endpoint, headers=headers)
```

Refer to the exhibit. A developer is part of a team that is working on an open-source project in which source code is hosted in a public GitHub repository. While the application was built, security concerns were addressed by encrypting the credentials on the server. After a few months, the developer realized that a hacker managed to gain access to the account. The exhibit contains part of the source code for the login process. Why was the attacker able to access the developer's account?

- A. The encoded credentials were available in the source code.
- B. The application was not encrypting the communication with the server.
- C. The credentials were encrypted in the source code.
- D. An SSL certificate was used instead of the TLS protocol to authenticate.

Answer: A

**NEW QUESTION 436**

- (Exam Topic 3)

## Object Lookup

Use the `MoDirectory.lookupByDn` to look up an object within the MIT object tree by its distinguished name (DN). This example looks for an object called 'uni':

```
uniMo = moDir.lookupByDn('uni')
```

A successful lookup operation returns a reference to the object that has the specified DN.

You can also look up an object by class. This example returns a list of all objects of the class 'poUni':

```
uniMo = moDir.lookupByClass('poUni')
```

You can add a filter to a lookup to find specific objects. This example returns an object of class 'fvTenant' whose name is 'Tenant1':

```
tenant1Mo = moDir.lookupByClass("fvTenant", propFilter='and(eq(fvTenant.name, "Tenant1"))')
```

Refer to the exhibit. Drag and drop the code from the bottom onto the box where the code is missing to add a subnet to each bridge domain in the Ten1 tenant. Not all options are used.

```

from cobra.model import fv
from cobra.mit.request import ClassQuery, DnQuery
import cobra.mit.access
import cobra.mit.session

tenname = "Ten1"
ls = cobra.mit.session.LoginSession(
    'https://10.100.1.200', "admin", "Lab123!3")

aci = cobra.mit.access.MoDirectory(ls)
aci.login()
c = cobra.mit.request.ConfigRequest()

qry1 =  (f'uni/tn-{tenname}')
fvTenant = aci.query(qry1)[0]

qry2 =  ("fvBD")
qry2.propFilter = f'and(wcard(fvBD.dn,"{fvTenant.dn}"))'
fvBDs = aci.query(qry2)

i=0
for fvBD in fvBDs:
    fvsubnet = cobra.model.fv.Subnet( , ip=f'10.114.{i}.1/24')
    c.addMo(fvBD)
    aci.  (c)
    i+=
    
```

- 
- 
- 
- 
- 
- 
- 

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

```

from cobra.model import fv
from cobra.mit.request import ClassQuery, DnQuery
import cobra.mit.access
import cobra.mit.session

tenname = "Ten1"
ls = cobra.mit.session.LoginSession(
    'https://10.100.1.200', "admin", "Lab123!3")

aci = cobra.mit.access.MoDirectory(ls)
aci.login()
c = cobra.mit.request.ConfigRequest()

qry1 =  (f'uni/tn-{tenname}')
fvTenant = aci.query(qry1)[0]

qry2 =  ("fvBD")
qry2.propFilter = f'and(wcard(fvBD.dn,"{fvTenant.dn}"))'
fvBDs = aci.query(qry2)

i=0
for fvBD in fvBDs:
    fvsubnet = cobra.model.fv.Subnet( , ip=f'10.114.{i}.1/24')
    c.addMo(fvBD)
    aci.  (c)
    i+=
    
```

- 
- 
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- 

**NEW QUESTION 437**

- (Exam Topic 3)

```

#!/bin/bash
apt-get update
apt-get -y install git
cd Code/Network_Config
mkdir PRODUCTION
cd PRODUCTION
touch state.yml
vi state.yml
    
```

Refer to the exhibit. A network engineer executes the bash script shown. Which two things are achieved by running the script? (Choose two.)

- A. A directory called PRODUCTION is created.
- B. The engineer changes to the parent directory.
- C. A YAML file is created.
- D. A YAML file is removed.
- E. A directory called state.yml is created.

**Answer:** AC

**NEW QUESTION 441**

- (Exam Topic 2)

What is the main purpose of a code review?

- A. To provide the technical lead visibility into all code
- B. To identify and review errors with the team
- C. To ensure that all code is checked in simultaneously
- D. To detect logical errors

**Answer:** B

**NEW QUESTION 442**

- (Exam Topic 2)

Refer to the exhibit.

```
import requests, sys
from config import user, password

url = "http://restconf.devnet.com:9443/api/running/interfaces"
headers = 
response = requests.put(url, auth=(user, password), headers=headers,
verify=False)
print(response.text)
```

A network engineer wants to use an API to update information about device interfaces. The network devices are deployed in a Cisco DevNet Sandbox and have running interfaces. Which line of code needs to be placed in the snippet where the code is missing?

- A. {'Content-Type': 'application/yang.data+xml', 'Accept': 'application/yang.data+xml'}
- B. {'Content-Type': 'application/yang.data+yaml', 'Accept': 'application/yang.data+yaml'}
- C. {'Content-Type': 'application/restconf.data+json', 'Accept': 'application/ restconf.data+json'}
- D. {'Content-Type': 'application/yang.data+utf8', 'Accept': 'application/ restconf.data+utf8'}

**Answer:** C

**NEW QUESTION 446**

- (Exam Topic 2)

Which configuration management tool has an agentless capability?

- A. Chef
- B. Puppet
- C. Ansible
- D. CFEngine

**Answer:** C

**NEW QUESTION 450**

- (Exam Topic 2)

Refer to the exhibit.

```
API Documentation:
Integrations are how you request permission to invoke the Webex REST API on behalf of another Webex Teams user. To do this in a secure way the API supports the OAuth 2 standard which allows third-party integrations to get a temporary access token for authenticating API calls instead of asking users for their password

Script:
01 import requests
02
03 base_url = "https://webexapis.com/v1"
04 header = {"Key": "Value"}
05
06 url = "{}/{}".format(base_url, "/teams")
07 print(requests.get(url, headers=header).status_code)
```

A developer creates a Python script that queries Cisco Webex. When the script is executed, a 401 code is returned. After troubleshooting, the developer discovers that the service is missing privileges. Which change to the header in line 4 of the script results in the code 200?

A)

```
header = {"Authentication": "Bearer YOUR_TOKEN"}
```

B)

```
header = {"Authentication Bearer" : "YOUR_TOKEN"}
```

C)

```
header = {"Authorization" : "Bearer YOUR_TOKEN"}
```

D)

```
header = {"Authorization Bearer" : "YOUR_TOKEN"}
```

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

Answer: C

**NEW QUESTION 452**

- (Exam Topic 2)

What is a capability of an agentless configuration management system?

- A. It requires managed hosts to have an interpreter for a high-level language such as Python or Ruby.
- B. It requires managed hosts to connect to a centralized host to receive updated configurations.
- C. It uses compiled languages as the basis of the domain-specific language to interface with managed hosts.
- D. It uses existing protocols to interface with the managed host.

Answer: D

**NEW QUESTION 457**

- (Exam Topic 3)

Which TCP port is used to connect to a network device by using Telnet?

- A. 23
- B. 69
- C. 400
- D. 830

Answer: A

**NEW QUESTION 462**

- (Exam Topic 3)



Refer to the exhibit. Drag and drop the code from the bottom onto the box where the code is missing to construct a request that generates a security token and gets a list of network devices. Not all options are used.

```
import json, requests, urllib3
from requests.auth import HTTPBasicAuth
from config import host, username, password

headers = { 'content-type': "application/json", 'x-auth-token': "" }
def dna_api_auth(host, username, password):
    url = "https://{}/api/system/v1/auth/token".format(host)
    response = [redacted] .post(url, auth=HTTPBasicAuth(username, password),
        headers=headers, verify=False)
    return response.json()["Token"]

def list_dna_devices(token):
    url = "https://{}/api/v1/network-device".format(host)
    headers["x-auth-token"] = token
    response = requests.get(url, headers=headers, verify=False)
    data = [redacted] .json()
    for item in data['response']:
        print(item["hostname"])

token = [redacted] (host, username, password)
[redacted] (token)
```

- |          |                  |              |          |
|----------|------------------|--------------|----------|
| response | reply            | dna_api_auth | requests |
| json     | list_dna_devices | list devices |          |

- A. Mastered
- B. Not Mastered

Answer: A

**Explanation:**

```
import json, requests, urllib3
from requests.auth import HTTPBasicAuth
from config import host, username, password

headers = { 'content-type': "application/json", 'x-auth-token': "" }
def dna_api_auth(host, username, password):
    url = "https://{}/api/system/v1/auth/token".format(host)
    response = requests .post(url, auth=HTTPBasicAuth(username, password),
        headers=headers, verify=False)
    return response.json()["Token"]

def list_dna_devices(token):
    url = "https://{}/api/v1/network-device".format(host)
    headers["x-auth-token"] = token
    response = requests.get(url, headers=headers, verify=False)
    data = response .json()
    for item in data['response']:
        print(item["hostname"])

token = dna_api_auth (host, username, password)
list_dna_devices (token)
```

- |          |                  |              |          |
|----------|------------------|--------------|----------|
| response | reply            | dna_api_auth | requests |
| json     | list_dna_devices | list devices |          |

**NEW QUESTION 467**

- (Exam Topic 3)

Which IP service is used to monitor the performance of network devices?

- A. SNMP
- B. DHCP
- C. DNS

D. NTP

Answer: A

**NEW QUESTION 469**

- (Exam Topic 3)

What is a comparison of YAML and JSON?

- A. YAML has a more consistent approach to representing data compared to JSON.
- B. JSON does not support comments and YAML does.
- C. YAML is a more verbose data structure compared to JSON.
- D. JSON has more common usage in configuration management tools compared to YAML.

Answer: B

**Explanation:**

Reference: <https://stackoverflow.com/questions/244777/can-comments-be-used-in-json>

Can I use comments in JSON? No, JSON is a data-only format. Comments in the form //, #, or /\* \*/, which are used in popular programming languages, are not allowed in JSON. You can add comments to JSON as custom JSON elements that will hold your comments, but these elements will still be data.

**NEW QUESTION 473**

- (Exam Topic 3)

```
get_interface_info_by_id(device_id, headers=None, **request_parameters) [source]
```

Returns list of interfaces by specified device.

**Parameters**

- `device_id` (*basestring*) - Device ID.
- `headers` (*dict*) - Dictionary of HTTP Headers to send with the Request .
- `**request_parameters` - Additional request parameters (provides support for parameters that may be added in the future).

**Returns**

JSON response. Access the object's properties by using the dot notation or the bracket notation.

**Return type**

MyDict

**Raises**

- `TypeError` - If the parameter types are incorrect.
- `MalformedRequest` - If the request body created is invalid.
- `ApiError` - If the DNA Center cloud returns an error.

Refer to the exhibit. Drag and drop the code from the bottom onto the box where the code is missing to return the number of interfaces on a network device by using the Cisco DNA Center SDK. Not all options are used.

```
from dnacentersdk import DNACenterAPI
base_url = 'https://10.9.11.226'
[ ] = 'da4606c3-63ad-4ed4-8f35-6bfec7c2df04'

dnac = [ ](username='cisco', password='secret',
base url=base url, version='1.3.3', verify=False)

[ ] = [item['portName'] for item in
dnac.[ ].get_interface_info_by_id(device_id)['response']]

# Check the number of ports on the device
print(f'The list of interfaces contains {len(port_list)} items.')

# Output
# The list of interfaces contains 54 items.
```

- router\_id
- device\_id
- DNACenterAPI
- DNAC
- port\_list
- routers
- devices

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

```

from dnacentersdk import DNACenterAPI
base_url = 'https://10.9.11.226'
device_id = 'da4606c3-63ad-4ed4-8f35-6bfec7c2df04'

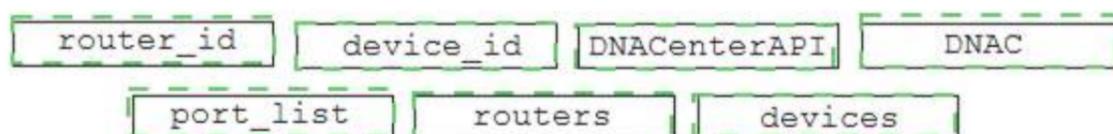
dnac = DNACenterAPI(username='cisco', password='secret',
                    base_url=base_url, version='1.3.3', verify=False)

port_list = [item['portName'] for item in
             dnac.devices.get_interface_info_by_id(device_id)['response']]

# Check the number of ports on the device
print(f'The list of interfaces contains {len(port_list)} items.')

# Output
# The list of interfaces contains 54 items.

```



**NEW QUESTION 478**

- (Exam Topic 3)

A developer pushes an application to production. The application receives a webhook over HTTPS without a secret. The webhook information contains credentials to service in cleartext. When the information is received, it is stored in the database with an SHA-256 hash. Credentials to the database are accessed at runtime through the use of a vault service. While troubleshooting, the developer sets the logging to debug to view the message from the webhook. What is the security issue in this scenario?

- A. Database credentials should be accessed by using environment variables defined at runtime.
- B. During the transport of webhook messages, the credentials could be unencrypted and leaked.
- C. During logging, debugging should be disabled for the webhook message.
- D. Hashing the credentials in the database is not secure enough; the credentials should be encrypted.

Answer: B

**NEW QUESTION 482**

- (Exam Topic 3)

A developer has addressed a bug that was found in the production code of an application. A separate file named 'bug427896191v\_fix' has been created with the changes to the code. Which Git command must be used to incorporate the bug fix into the production code?

- A. git rebase
- B. git cat-file
- C. git merge-file
- D. git bisert

Answer: C

**NEW QUESTION 487**

- (Exam Topic 3)

Which two commands download and execute an Apache web server container in Docker with a port binding 8080 in the container to 80 on the host? (Choose two.)

- A. docker pull apache
- B. docker run -p 8080:80 httpd
- C. docker run -p 80:8080 httpd
- D. docker pull httpd
- E. docker pull https

Answer: CD

**NEW QUESTION 492**

- (Exam Topic 3)

Which function does a router provide to a network?

- A. broadcast domain segmentation
- B. unique host on a Layer 3 network
- C. unique hardware address for every node on a LAN
- D. broadcast domain extension

Answer: B

**NEW QUESTION 493**

- (Exam Topic 3)  
 What is a benefit of version control?

- A. prevents two users from working on the same file
- B. keeps track of all changes to the files
- C. prevents the sharing of files
- D. keeps the list of data types used in the files

Answer: B

**NEW QUESTION 498**

- (Exam Topic 3)  
 A developer is working on a new feature in a branch named 'newfeat123456789' and the current working primary branch is named 'prim987654321'. The developer requires a merge commit during a fast forward merge for record-keeping purposes. Which Git command must be used?

- A. git merge --no-ff newfeat123456789
- B. git commit --no-ff newfeat123456789
- C. git add --commit-ff newfeat123456789
- D. git reset --commit-ff newfeat123456789

Answer: A

**NEW QUESTION 499**

- (Exam Topic 3)

```
FROM myImage
VOLUME ["/data"]
ENTRYPOINT ["/bin/sh"]
```

Refer to the exhibit. Drag and drop the actions from the left that the contents of this Dockerfile accomplish onto the right. Not all options are used.

Inject the image myImage.	step 1
Pull the image myImage.	step 2
Execute the "data" script under "/bin/sh".	step 3
Establish a volume whose root is "/data".	
Put the user in a shell inside the container.	

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Inject the image myImage.	Pull the image myImage.
Pull the image myImage.	Establish a volume whose root is "/data".
Execute the "data" script under "/bin/sh".	Put the user in a shell inside the container.
Establish a volume whose root is "/data".	
Put the user in a shell inside the container.	

**NEW QUESTION 503**

- (Exam Topic 3)

To which stage of development do Infrastructure as Code principles relate?

- A. manual configuration
- B. service provisioning
- C. physical deployment
- D. requirement collection

**Answer: B**

**NEW QUESTION 507**

- (Exam Topic 3)

```

- 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:ianaif="urn:ietf:params:xml:ns:yang:iana-if-type">ianaif: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>
  
```

Refer to the exhibit. A network engineer must configure new interfaces on a set of devices and is planning to use an Ansible playbook for the task. All devices support SSH and NETCONF protocol, and the interface variables are unique per device. In which directory are the YAML files including variables hosted to automate the task with the netconf\_config module?

- A. current working directory
- B. host\_vars directory
- C. group\_vars directory
- D. home directory

**Answer: A**

**NEW QUESTION 508**

- (Exam Topic 3)

A developer is developing a web application that uses username and password to authenticate to the next service. The user credentials must be available at any time in the application. The developer must choose and implement a secure method of storing the authentication credentials that are used in the automation code. Which password handling method must be used to minimize the security risk?

- A. Store the username and password in a separate configuration file.
- B. Store the username and password in a vault.
- C. Store the passwords in a dictionary.
- D. Store the username and password in code.

**Answer: B**

**NEW QUESTION 509**

- (Exam Topic 3)

Refer to the exhibit.

```

workstation:Network admin$ ls
PROD TEST
workstation:Network admin$ ls ./TEST
config.txt
workstation:Network admin$
  
```

A network engineer must copy the "config.txt" file from directory TEST to directory PROD. The copied file must also be renamed into "current.txt". Which command must be used to accomplish these tasks?

- A. cp ./PROD/current.txt ./TEST/config.txt
- B. cp ./TEST/current.txt ./PROD/config.txt
- C. cp ./PROD/config.txt ./TEST/current.txt
- D. cp ./TEST/config.txt ./PROD/current.txt

**Answer: D**

**NEW QUESTION 511**

- (Exam Topic 3)

What is a benefit of using a code review process in application development?

- A. accelerates the deployment of new features in an existing application
- B. provides version control during code development
- C. enables the quick deployment of new code
- D. eliminates common mistakes during development

**Answer:** D

**NEW QUESTION 512**

- (Exam Topic 3)

Which Python function is used to parse a string that contains JSON data into a Python dictionary?

- A. json.dumps()
- B. json.to\_json()
- C. json.parse()
- D. json.loads()

**Answer:** D

**Explanation:**

loads() function is present in python built-in 'json' module. This function is used to parse the JSON string.

**NEW QUESTION 516**

- (Exam Topic 3)

```

1 import requests
2 from requests.auth import HTTPBasicAuth
3 BASE_URL = 'https://<IP ADDRESS or FQDN>'
4 AUTH_URL = '/dna/system/api/v1/auth/token'
5 TOKEN = '<TOKEN>'
6
7 headers = {'X-Auth-Token': TOKEN, 'Content-Type': 'application/json'}
8
9 DEVICES_COUNT_URL = '/dna/intent/api/v1/network-device/count'
10 DEVICES_URL = '/dna/intent/api/v1/network-device'
11 DEVICES_BY_ID_URL = '/dna/intent/api/v1/network-device/'
12
13 def devices_func(headers):
14     response = requests.get(BASE_URL + DEVICES_COUNT_URL,
15                             headers = headers, verify=False)
16     return response.json()['response']
17
18 def devices_test(headers, query_string_params):
19     response = requests.get(BASE_URL + DEVICES_URL, headers = headers,
20                             params = query_string_params, verify=False)
21     return response.json()['response']
22
23 def devices_info(headers, device_id):
24     response = requests.get(BASE_URL + DEVICES_BY_ID_URL + device_id,
25                             headers = headers, verify=False)
26     return response.json()['response']
27
28 print(devices_func(headers))
29 print(devices_test(headers, {}))
30 print(devices_test(headers, {'hostname': 'CSR1Kv-01.devnet.local'}))
31 response = devices_test(headers, {'platformId': 'C9500-40X'})
32 print(devices_info(headers, response[0]['id']))

```

Refer to the exhibit. An engineer prepares a script to automate workflow by using Cisco DNA Center APIs to display:

- total count of devices
  - list of the network devices
  - information of one device with a hostname filter
- What is displayed in the final step after the Python script is executed?

- A. information about a device of type C9500-40x.
- B. filtered results by the hostname and the platformId C9500-40X
- C. information about the test devices
- D. list of devices with platformId C9500-40x

**Answer:** B

**NEW QUESTION 517**

- (Exam Topic 3)

A company wants to automate the orders processed on its website using API. The network device that supports the solution must:

- support XML encoding
- support distributed transactions
- support YANG data models
- be support software redundancy

Which requirement prevents the use of RESTCONF for the solution?

- A. software redundancy
- B. YANG data models
- C. distributed transactions
- D. XML encoding

**Answer:** C

#### NEW QUESTION 522

- (Exam Topic 3)

A developer plans to deploy a new application that will use an API to implement automated data collection from Webex with these requirements:  
The application was created by using the request library. Requires HTTP basic authentication.

Provides data in JSON or XML formats.

Which Cisco DevNet resource helps the developer with how to use the API?

- A. DevNet sandbox
- B. API documentation
- C. forums
- D. DevNet code exchange

**Answer:** B

#### NEW QUESTION 527

- (Exam Topic 3)

Which protocol is used for clock synchronization between network devices?

- A. FTP
- B. NNTP
- C. BGP
- D. NTP

**Answer:** D

#### Explanation:

Network Time Protocol (NTP) is an internet protocol used to synchronize with computer clock time sources in a network. It belongs to and is one of the oldest parts of the TCP/IP suite. The term NTP applies to both the protocol and the client-server programs that run on computers.

#### NEW QUESTION 528

- (Exam Topic 3)

Which two details are captured from the subnet mask? (Choose two.)

- A. portion of an IP address that refers to the subnet
- B. default gateway of the host
- C. unique number ID assigned to the host
- D. part of an IP address that refers to the host
- E. network connection of a host or interface

**Answer:** AD

#### NEW QUESTION 532

- (Exam Topic 3)

A developer creates an application that must provide an encrypted connection or API keys. The keys will be used to communicate with a REST API. Which command must be used for the secure connection?

- A. `curl-X PUSH 'http://username.app.com/endpoint/?api_key=12345abcdef'`
- B. `curl -v 'ftp://username.app.com/endpoint/?api_key=12345abcdef'`
- C. `curl -X GET 'https://username.app.com/endpoint/?api_key=12345abcdef'`
- D. `curl-X GET 'http://username.app.com/endpoint/?api_key=12345abcdef'`

**Answer:** C

#### NEW QUESTION 533

- (Exam Topic 3)

Why would a developer compare a current version of code to a previous version?

- A. to provide the single source of truth
- B. to troubleshoot code failures
- C. to track who made a change
- D. to aid in collaboration

**Answer:** B

#### NEW QUESTION 534

- (Exam Topic 3)

An engineer prepares a set of Python scripts to interact with network devices. To avoid network performance issues, the engineer wants to run them in a test environment. Which resource must be used to monitor the live execution of code in an always-available environment?

- A. packet tracer

- B. learning labs
- C. sandbox
- D. code exchange

**Answer:** C

**NEW QUESTION 535**

- (Exam Topic 3)

What are two benefits of implementing common data structures when working with APIs in remote systems? (Choose two.)

- A. ensures that developers are limited to using one data schema type
- B. prevents multivendor interoperability
- C. improves security in RESTful web services
- D. enforces standardized data structures
- E. leverages code that is easily managed and reused

**Answer:** BE

**NEW QUESTION 540**

- (Exam Topic 3)

Refer to the exhibit.

```
cd ~/development/project01
mkdir info
cd info
[REDACTED]
cp ./requirements.txt ~/Documents/backup/requirements.txt
```

A developer just finished testing a Python script and wants to save the list of packages and versions installed on the current machine. The developer must make sure that it will not cause any issues if tested on another device due to different library versions. Which line of code needs to be placed on the snippet where the code is missing?

- A. pip freeze > requirements.txt
- B. pip freeze > requirements.txt
- C. pip freeze => requirements.txt
- D. pip freeze | requirements.txt

**Answer:** B

**Explanation:**

pip freeze requirements.txt ile ilgili görsel sonucu The most common command is pip freeze > requirements.txt , which records an environment's current package list into requirements.txt. If you want to install the dependencies in a virtual environment, create and activate that environment first, then use the Install from requirements.

**NEW QUESTION 542**

- (Exam Topic 3)

What is a principle of a code review process?

- A. Changes are made after the code is submitted to source control.
- B. It must not prevent code from getting into production as quickly as possible.
- C. Naming standards must be consistent.
- D. A technical lead must sign off on the review.

**Answer:** D

**NEW QUESTION 543**

- (Exam Topic 3)

Refer to the exhibit. Drag and drop the code snippets from the bottom onto the blanks in the Python script to retrieve a list of network devices from Cisco DNA Center. Not all options are used.

```
import requests
import json
from urllib3.exceptions import InsecureRequestWarning

requests.packages.urllib3.disable_warnings()

dna_center_url = "My_DNA_Center_URL"
authentication = ("dnacenteruser", "dnacenter_password")

def get_token ():
    url = "https:// "+dna_center_url+"/dna/system/api/v1/auth/token"
    response = requests.post(url, auth=authentication, verify=False)
    token = response.json()['Token']
    return token

def get_device_list():
    token = [ ]
    url = "https:// "+dna_center_url+ "dna/intent/api/v1/[ ]"
    header = { [ ]: token, 'content-type' : 'application/json'}
    response = requests.get(url, headers=header)
    device_list = [ ]
    print(json.dumps (device_list, indent=4))
if_name_ == "_main_":
    get_device_list()
```

- get\_token()
- network-device
- x-auth-token
- response.json()
- response.xml
- Authorization

- A. Mastered
- B. Not Mastered

Answer: A

**Explanation:**

```
import requests
import json
from urllib3.exceptions import InsecureRequestWarning

requests.packages.urllib3.disable_warnings()

dna_center_url = "My_DNA_Center_URL"
authentication = ("dnacenteruser", "dnacenter_password")

def get_token ():
    url = "https:// "+dna_center_url+"/dna/system/api/v1/auth/token"
    response = requests.post(url, auth=authentication, verify=False)
    token = response.json()['Token']
    return token

def get_device_list():
    token = [ get_token() ]
    url = "https:// "+dna_center_url+ "dna/intent/api/v1/[network-device]"
    header = { [x-auth-token]: token, 'content-type' : 'application/json'}
    response = requests.get(url, headers=header)
    device_list = [response.json()]
    print(json.dumps (device_list, indent=4))
if_name_ == "_main_":
    get_device_list()
```

- get\_token()
- network-device
- x-auth-token
- response.json()
- response.xml
- Authorization

**NEW QUESTION 545**  
 - (Exam Topic 3)

**POST** /v1/meetings

**Body Parameters**

**title**  
 string Required  
 Meeting title. The title can be a maximum of 128 characters long.

**agenda**  
 string  
 Meeting agenda. The agenda can be a maximum of 2500 characters long.

**password**  
 string  
 Meeting password. Must conform to the site's password complexity settings. Read [password management](#) for details. If not specified, a random password conforming to the site's password rules will be generated automatically.

**start**  
 string Required  
 Date and time for the start of meeting in any [ISO 8601](#) compliant format. start cannot be before current date and time or after end. Duration between start and end cannot be shorter than 10 minutes or longer than 24 hours.

**end**  
 string Required  
 Date and time for the end of meeting in any [ISO 8601](#) compliant format. end cannot be before current date and time or before start. Duration between start and end cannot be shorter than 10 minutes or longer than 24 hours.

Refer to the exhibit. A bespoke meeting booking system must be integrated with Cisco Webex so that meetings are created automatically. Drag and drop the code from the bottom onto the box where the code is missing to create a sample meeting. Not all options are used.

```
import requests, json

[ ] = 'eyJhbGc ... yJbN8'

headers = {
    'Authorization': f'Bearer {token}',
    'Content-Type': 'application/json'
}

payload = {
    "title": "DevNet Webex Discussion",
    "password": "AGrtq1234",
    "start": "2020-11-10T15:00:00Z",
    "end": "2020-11-10T17:00:00Z",
    "enabledAutoRecordMeeting": False,
    "allowAnyUserToBeCoHost": False
}

response = requests.request(" [ ] ", f'{BASE_URL}/ [ ] ',
    headers=headers, data=json.dumps( [ ] ))
print(response.text.encode('utf8'))
```

- payload
- PUT
- token
- v1/meeting
- v1/meetings
- POST

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

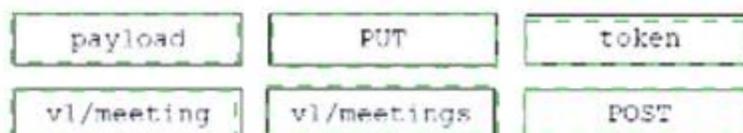
```
import requests, json

token = 'eyJhbGc ... yJbN8'

headers = {
    'Authorization': f'Bearer {token}',
    'Content-Type': 'application/json'
}

payload = {
    "title": "DevNet Webex Discussion",
    "password": "AGrtgl234",
    "start": "2020-11-10T15:00:00Z",
    "end": "2020-11-10T17:00:00Z",
    "enabledAutoRecordMeeting": False,
    "allowAnyUserToBeCoHost": False
}

response = requests.request("POST", f'{BASE_URL}/v1/meetings',
    headers=headers, data=json.dumps(payload))
print(response.text.encode('utf8'))
```



**NEW QUESTION 546**

- (Exam Topic 3)

A company requires a new platform to store large volumes of log data that is generated in their assembly plant. The platform must be scalable, so the underlying technology must provide a path for fast deployment of new nodes for data and indexing? The data contains sensitive information, so specialist encryption tools must be used to secure the data. Which application deployment model meets the requirements?

- A. edge
- B. private cloud
- C. public cloud
- D. hybrid cloud

**Answer:** D

**Explanation:**

A hybrid cloud combines the benefits of both a private cloud, which offers the ability to store sensitive data in a secure, dedicated environment, and a public cloud, which offers the ability to scale quickly and easily by deploying new nodes as needed. With a hybrid cloud deployment, you could use specialist encryption tools to secure the sensitive data in the private cloud, and then take advantage of the scalability and flexibility of the public cloud to handle the large volumes of log data.

**NEW QUESTION 551**

.....

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