

## Exam Questions 200-901

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

<https://www.2passeasy.com/dumps/200-901/>



### NEW QUESTION 1

- (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 2

- (Exam Topic 2)

What is a capability of the NETCONF protocol?

- A. allows Python scripts to be executed externally from a network device
- B. uses JSON to encode data in its content layer
- C. allows XML messages to be exchanged via the SSH protocol
- D. exposes a web-based interface

**Answer:** C

### NEW QUESTION 3

- (Exam Topic 2)

Refer to the exhibit.

```
import requests
from requests.auth import HTTPBasicAuth
headers = {'Content-Type': 'application/json'}
base_url = 'https://10.1.2.3'
auth_url = '/dna/system/api/v1/auth/token'
devices_url = '/dna/intent/api/v1/network-device'

token = requests.post(
    base_url + auth_url, headers=headers,
    auth=HTTPBasicAuth(username="admin", password="DevNet123"))
data = token.json()

query_string_params = {'platformId': 'C9500-40X'}
response = requests.get(
    base_url + devices_url, headers=headers,
    params=query_string_params)
print(f'{response.code}')
```

A network engineer must manage the network devices. The engineer prepares a Python scripts to authenticate to the Cisco to DNA Center API and request a device list. The device request fails and returns errors code 401. Which action solves the problem?

- A. Update the API UR
- B. which matched the API endpoint for device list.
- C. Send the request to another network in case there are reachability Issues.
- D. Send the Authentication header In the request with a valid configuration.
- E. Update the credentials that are already supplied and retry the request

**Answer:** D

### NEW QUESTION 4

- (Exam Topic 2)

Drag and drop the types of management from the left onto the levels at which they are performed on the right.

user and programmability interaction through the use of lower level APIs
user and programmability interaction through the use of Northbound APIs
iterate over a list of devices
configure features with YANG models

Controller level
Device level

A. Mastered

B. Not Mastered

Answer: A

Explanation:  
Graphical user interface, application Description automatically generated with medium confidence

NEW QUESTION 5  
- (Exam Topic 2)

Devices

Get Device Count

Operation Id: `getDeviceCount`

Description: Returns the count of network devices based on the filter criteria by management IP address, mac address, hostname and location name

GET

/dna/intent/api/v1/network-device/count

Request Parameters

Responses

Status: 200

The request was successful. The result is contained in the response body.

Schema Definition

Example Body

CountResult

response: integer

version: string

+ -

Refer to the exhibit. Drag and drop the code snippets from the bottom onto the blanks in the code to construct a request to find the Cisco DNA Center switch count. Not all options are used.

```
curl -L --request  \  
--  https:///dna/intent/api/v1/network-device/  \  
\ --header '  : application/json' \  
--header 'Accept: application/json'
```

url

network

count

POST

GET

Content-Type

A. Mastered  
B. Not Mastered

Answer: A

Explanation:

```
curl -L --request GET \
--url https://dna/intent/api/v1/network-device/ count \
--header 'Content-Type: application/json' \
--header 'Accept: application/json'
```

url	network	count
POST	GET	Content-Type

#### NEW QUESTION 6

- (Exam Topic 2)

Which protocol runs over TCP port 22?

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

Answer: A

#### NEW QUESTION 7

- (Exam Topic 2)

Which protocol runs over TCP port 23?

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

Answer: D

#### NEW QUESTION 8

- (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 9

- (Exam Topic 2)

Refer to the exhibit.



```

1 import requests
2 import json
3
4 BASE_URL = "https://<IP Address>"
5 FIRST_URL = "/dna/intent/api/v1/network-device"
6 SECOND_URL = "/dna/intent/api/v1/network-device-poller/cli/read-request"
7 THIRD_URL = "/dna/intent/api/v1/task/{task_id}"
8 FOURTH_URL = "/dna/intent/api/v1/file/{file_id}"
9
10 headers = {"X-Auth-Token": "TOKEN", "Content-Type": "application/json"}
11
12 params = {"platformId": "C9500-40X"}
13 response = requests.get(BASE_URL + FIRST_URL, headers=headers, params=params)
14 devices = []
15 for device in response.json()["response"]:
16     devices.append(device["id"])
17
18     payload = {
19         "commands": ["show version", "show ip int brief"],
20         "deviceUids": devices,
21         "timeout": 0,
22     }
23 response = requests.post(BASE_URL + SECOND_URL, data=json.dumps(payload),
24     · headers=headers)
25 task_id = response.json()["response"]["taskId"]
26 response = requests.get(BASE_URL + THIRD_URL.format(task_id=task_id),
27     · headers=headers)
28 progress_json = json.loads(response.json()["response"]["progress"])
29 file_id = progress_json("fileId")
30 response = requests.get(BASE_URL + FOURTH_URL.format(file_id=file_id),
31     · headers=headers)
32 file_json = response.json()
33 for cmd in file_json:
34     print(file_json[cmd]["commandResponses"]["SUCCESS"]["show ip int brief"])

```

A network engineer must collect information from the network using Cisco DNA Center APIs. The script must query for the devices with 'platformId' 'C9540-x' and then send commands to be executed. Which process is automated by the Python script?

- A. results gathering of the show version and show ip int brief commands
- B. output of show ip int brief command on devices of type C9500-40X
- C. execution information of the show version and show ip int brief commands
- D. list of executed commands on C9500-40X and the information of show ip int brief command

Answer: B

## NEW QUESTION 10

- (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.

```

import requests
import json
url = 'https://dashboard.meraki.com/api/v0/'
headers = {' ': '0110c4e1b8a1',
           'Content-Type': ' '}
orgs = json.loads(requests.get(url+'organizations', headers=headers).text)

for org in orgs:
    nets = json.loads(requests.get(url+'organizations/'+org['id']+'/networks',
    headers=headers).text)
    for net in nets:
        clients = json.loads(requests.get(
            url+ ' /'+net['id']+' / ',
            headers=headers).text)
        for client in clients:
            print(client['ip'])

```

client

application/json

application/xml

clients

X-Cisco-Meraki-API-Key

networks

Authorization: Bearer

- A. Mastered
- B. Not Mastered

**Answer:** A

**Explanation:**

```
import requests
import json
url = 'https://dashboard.meraki.com/api/v0/'
headers = {'X-Cisco-Meraki-API-Key': '0110c4e1b8a1',
           'Content-Type': 'application/json'}
orgs = json.loads(requests.get(url+'organizations', headers=headers).text)

for org in orgs:
    nets = json.loads(requests.get(url+'organizations/'+org['id']+'/networks',
                                   headers=headers).text)
    for net in nets:
        clients = json.loads(requests.get(
            url+'clients/'+net['id']+'/networks',
            headers=headers).text)
        for client in clients:
            print(client['ip'])
```

client	
application/xml	
Authorization: Bearer	

#### 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 15

- (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 20

- (Exam Topic 2)

Refer to the exhibit.

**API v1 documentation:**

Authentication and authorization: Bearer Token  
 Inventory endpoint: /api/v1/inventory  
 Method: GET  
 Response formats: text/html, application/json, application/html

**Token:**

dXNlcm5hbWU6cGFzc3dvcmQ=

**Api call:**

GET /api/v1/inventory HTTP/1.1  
 Host: example.com

**Response:**

HTTP/1.1 401 Unauthorized

An API call is constructed to retrieve the inventory in XML format by using the API. The response to the call is 401 Unauthorized. Which two headers must be added to the API call? (Choose two.)

- ☐ Accept: application/xml
- ☐ Content-Type: application/xml
- ☐ Authentication: Bearer dXNlcm5hbWU6cGFzc3dvcmQ=
- ☐ Bearer-Token: dXNlcm5hbWU6cGFzc3dvcmQ=
- ☐ Authorization: Bearer dXNlcm5hbWU6cGFzc3dvcmQ=

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

**Answer: BE**

**NEW QUESTION 24**

- (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 28**

- (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 30**

- (Exam Topic 2)

What is a benefit of organizing code into modules?

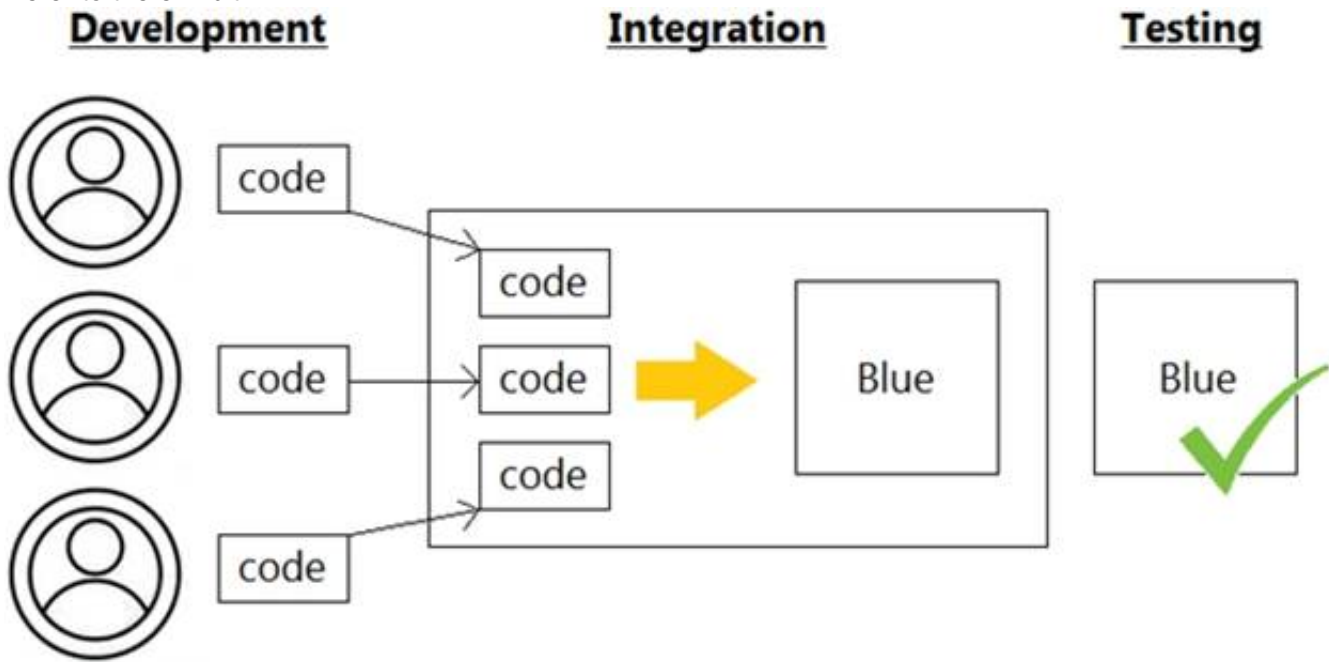


- A. improves overall performance
- B. reduces the length of code
- C. enables code to be multifunctional
- D. enables the reuse of code

Answer: D

NEW QUESTION 31

- (Exam Topic 2)  
Refer to the exhibit.



Which infrastructure automation method is shown?

- A. Waterfall
- B. CI/CD pipeline
- C. Agile
- D. Lean

Answer: C

NEW QUESTION 35

- (Exam Topic 2)  
Drag and drop the code snippets from the bottom into the Python script to write API output to a csv file. Not all options are used.

```
#!/usr/bin/env python3
import csv
import json
import 
#Create a request to grab info in api
response = requests. ('http://api.zippopotam.us/us/80301')

try:
    with open('80301.json', 'w') as outfile:
        json.dump(response.json(), outfile)
    print(.json())
except Exception as e:
    print(e)

with open('80301.csv', 'w') as outfile:
    json.dump(response.json(), outfile)
print(response.)
```

response	requests	request
get	status_code	status

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:  
Graphical user interface, text, application Description automatically generated

NEW QUESTION 36

- (Exam Topic 2)



What is the difference between YAML and JSON data structure?

- A. YAML uses spaces; JSON uses parentheses
- B. YAML uses indentation; JSON uses brackets and braces
- C. YAML uses brackets and braces; JSON uses indentation
- D. YAML uses parentheses; JSON uses spaces

Answer: A

### NEW QUESTION 39

- (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 at 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 41

- (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
15 if 'da4606c3-63ad-4ed4-8f35-6bfec7c2df04' in
• item['deviceId']]
14
15 # Sort list items
16 port_list_1.sort()
17 # Check the number of ports on the device
18 print(f'The list of interfaces contains {len(port_list_1)} items.')
19
20 # Output
21 # The list of interfaces contains 38 items.
22
23
24 # Get list of interfaces using the get interface info by device id api call
25 port_list_2 = [item['portName'] for item in
26 dnac.devices.get_interface_info_by_id('da4606c3-63ad-4ed4-8f35-
• 6bfec7c2df04')['response']]
27
28 # Sort list items
29 port_list_2.sort()
30 # Check the number of ports on the device
31 print(f'The list of interfaces contains {len(port_list_2)} items.')
32
33 # Output
34 # 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 46

- (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 51

- (Exam Topic 2)

What are two benefits of model-driven programmability?

- A. model-driven APIs for abstraction and simplification
- B. single choice of transport, protocol, and encoding
- C. model-based, structured, and human friendly
- D. easier to design, deploy, and manage APIs
- E. models decoupled from transport, protocol, and encoding

**Answer: DE**

#### NEW QUESTION 53

- (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 57

- (Exam Topic 2)

In the test-driven development model, what is changed after a test fails?

- A. test
- B. schedule
- C. project requirements
- D. code

Answer: D

#### Explanation:

Reference:

<https://www.guru99.com/test-driven-development.html#:~:text=In%20simple%20terms%2C%20test%20cases,c>

#### NEW QUESTION 60

- (Exam Topic 2)

Refer to the exhibit.

```
# base image
FROM alpine

# Install python and pip
RUN apk add --update py2-pip

# Install python modules needed by the python app
COPY requirements.txt /usr/src/app/
RUN pip install --no-cache-dir -r /usr/src/app/requirements.txt

#copy local files for the app to run
COPY app.py /usr/src/app/
COPY templates/index.html /usr/src/app/templates/

EXPOSE 8080

#run the application
CMD ["python", "/usr/src/app/app.py"]
```

Which function does the EXPOSE line perform when building an image from this Dockerfile?

- A. Local port 8080 of the container that launched with this docker image is accessible from co-hosted containers and external clients.
- B. Local port 8080 is not reachable at all because no IP address is specified along with the EXPOSE command of the Dockerfile.
- C. Local port 8080 is accessible from other containers running on the same docker host as the container that launched with this docker image.
- D. Local port 8080 of the container that launched with this docker image is accessible to external clients.

Answer: C

#### Explanation:

By default, the EXPOSE instruction does not expose the container's ports to be accessible from the host. In other words, it only makes the stated ports available for inter-container interaction.

Whereas publishing a port using either -P or -p exposes it, exposing a port using EXPOSE or --expose does not publish it.

So, while exposed ports can only be accessed internally, published ports can be accessible by external containers and services.

<https://www.whitesourcesoftware.com/free-developer-tools/blog/docker-expose-port/>

#### NEW QUESTION 61

- (Exam Topic 2)

A developer creates a script that configured multiple Cisco IOS XE devices in a corporate infrastructure. The internal test environment is unavailable, and no maintenance window is available to test on a low-priority production environment. Which resource is used to test the code before it is applied to the production environment?

- A. Code Exchange
- B. Cisco DevNet Learning Labs
- C. Cisco DevNet Sandbox
- D. Cisco Support

Answer: C

#### Explanation:

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

#### NEW QUESTION 62

- (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 65

- (Exam Topic 2)

class Native.Interface.FastEthernet

Bases: Entity

Class Hierarchy: Native Interface FastEthernet

This class represents configuration data.  
FastEthernet IEEE 802.3

name(key)
type: str
pattern: ([0-9]/)/([0-9]/)/([1-3][0-9])4[0-8]([0-9])\[0-9\]+)?

description
Interface specific description
type: str
pattern: \*

flowcontrol
Configure flow operation
type: Flowcontrol

isis
IS-IS commands
type: Isis

keepalive
Enable keepalive
type: bool

keepalive\_settings
type: KeepaliveSettings

Refer to the exhibit. Drag and drop the code snippets from the bottom to the blanks in the code to enable keepalive for the FastEthernet 2/0 interface. Not all options are used.

```
from ydk.services import CRUDService
from ydk.providers import NetconfServiceProvider as nc
from ydk.models.cisco ios xe import Cisco IOS XE native as model
ip = '10.10.20.48'
prctl = 'ssh'
user = 'developer'
psw = 'P@s$W0rD'
port = 830
provider = nc(address=ip, port=port, username=user, password=psw, protocol=prctl)
crud = CRUDService()

interface.name = '2/0'

if interface data:
    print('Keepalive is enabled.')
else:
    print('Keepalive is not enabled.')
```

```
interface_data = crud.update(provider, interface)
interface.keepalive = True
interface_data = crud.read(provider, interface)
interface = model.Native.Interface.FastEthernet()
interface.FastEthernet.keepalive_settings.keepalive = True
interface = model.Native.Interface()
```

- A. Mastered  
 B. Not Mastered

Answer: A

Explanation:

```
from ydk.services import CRUDService
from ydk.providers import NetconfServiceProvider as nc
from ydk.models.cisco ios xe import Cisco IOS XE native as model
ip = '10.10.20.48'
prctl = 'ssh'
user = 'developer'
psw = 'P@s$W0rD'
port = 830
provider = nc(address=ip, port=port, username=user, password=psw, protocol=prctl)
crud = CRUDService()

interface = model.Native.Interface.FastEthernet()
interface.name = '2/0'
interface.keepalive = True
interface_data = crud.read(provider, interface)

if interface data:
    print('Keepalive is enabled.')
else:
    print('Keepalive is not enabled.')
```

```
interface_data = crud.update(provider, interface)

interface.FastEthernet.keepalive_settings.keepalive = True
interface = model.Native.Interface()
```

#### NEW QUESTION 69

- (Exam Topic 2)

A local Docker alpine image has been created with an image ID of a391665405fe and tagged as "latest". Which command creates a running container based on the tagged image, with the container port 8080 bound to port 80 on the host?

- A. docker build -p 8080:80 alpine:latest  
 B. docker exec -p 8080:80 alpine:latest  
 C. docker start -p 8080:80 alpine:latest  
 D. docker run -p 8080:80 alpine:latest

**Answer:** D

**Explanation:**

[https://docs.docker.com/get-started/02\\_our\\_app/](https://docs.docker.com/get-started/02_our_app/)

#### NEW QUESTION 72

- (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 77

- (Exam Topic 2)

Which advantage does the agile process offer compared to waterfall software development?

- A. to view the full scope of end-to-end work
- B. to have each phase end before the next begins
- C. to fix any issues at the end of the development cycle
- D. to add or update features with incremental delivery

**Answer:** D

#### NEW QUESTION 79

- (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 84

- (Exam Topic 2)

Which HTTP code group is issued when a request is received successfully, understood, and processed?

- A. 2xx
- B. 3xx
- C. 4xx
- D. 5xx

**Answer:** A

**Explanation:**

[https://www.w3.org/Protocols/rfc2616/rfc2616-sec10.html#:~:text=10.2%20Successful%20xx,received%2C%](https://www.w3.org/Protocols/rfc2616/rfc2616-sec10.html#:~:text=10.2%20Successful%20xx,received%2C%20)

#### NEW QUESTION 88

- (Exam Topic 2)

Refer to the exhibit.



**Local File Attachments**

To send local file attachments, simply post a message by including your access token in the Authorization header and the path to your local file with the files parameter. Optionally, you can also include a plain-text message with the attachment by using the text parameter. When uploading files directly from your local filesystem, your request will need to be a multipart/form-data request rather than JSON

```
curl --request POST \  
  --form "files=@/home/desktop/example.png;type=image/png" \  
  --form "roomId=Y21zY2....." \  
  --form "text=example attached" \  
https://webexapis.com/v1/messages
```

A developer needs to upload a local file by using the REST API. The developer gathers information according to the documentation and sends the request by using the cURL command in the exhibit but gets an error code. Which action should be followed to get valid response?

- A. change content type as JSON
- B. add the authorization header with the access token
- C. add a username-password combination to request command
- D. change request method as GET

**Answer: B**

**Explanation:**

Reference: <https://developer.webex.com/docs/api/basics>

**NEW QUESTION 89**

- (Exam Topic 2)

What is a requirement when authenticating a RESTCONF API session with a router that runs Cisco IOS XE Software?

- A. No authentication is required.
- B. OAuth must be used.
- C. Basic authentication must be used.
- D. A token must be retrieved and the associated string must be embedded in the X-Auth-Token header.

**Answer: C**

**Explanation:**

<https://www.cisco.com/c/en/us/td/docs/routers/csr1000/software/restapi/restapi/RESTAPIClient.html>

**NEW QUESTION 94**

- (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 97

- (Exam Topic 2)

What is a difference between a synchronous API and an asynchronous API?

- A. An asynchronous API can make offline calls while synchronous APIs do not have this capability.
- B. Synchronous API calls are returned immediately while asynchronous calls do not guarantee an immediate response.
- C. Synchronous API calls require an authentication header to be sent while asynchronous calls do not require authentication.
- D. An asynchronous API can make a larger number of calls in a specified time period than a synchronous API.

**Answer:** B

#### Explanation:

Reference:

<https://stackoverflow.com/questions/36213948/what-is-the-difference-between-asynchronous-calls-and-callback>

#### NEW QUESTION 98

- (Exam Topic 2)

Refer to the exhibit.

```
1 #/bin/bash
2
3 curl https://cisco devnet.com/devnet-0.13.tar.gz -o /tmp/devnet.tar.gz
4 tar -zxvf /tmp/devnet.tar.gz
5 mkdir /tmp/devnet && pushd /tmp/devnet
6
7 ./configure && make && make install
8
9 systemctl enable devnet
10 systemctl start devnet
```

A network engineer works on a Cisco DevNet application that is available for download on the Cisco DevNet website. The engineer prepares a bash script to automate operations that relate to the application. Which workflow is being automated in the bash script?

- A. compilation and configuration of the Cisco DevNet application so that it must be started manually
- B. compilation, installation, and configuration of the Cisco DevNet application so that it starts automatically
- C. compilation and installation of the Cisco DevNet application for an autonomous deployment model
- D. installation and configuration of the Cisco DevNet application so that it starts manually

**Answer:** B

#### NEW QUESTION 100

- (Exam Topic 2)

How are load balancers used in modern application deployment?

- A. Allow traffic to continue as new compute units are brought up and old compute units are taken down.
- B. Allow http and https traffic to continue as old compute units are discontinued before new units are brought up.
- C. Turn off traffic and take down compute units, then update and bring the compute units back up.
- D. Bring up new compute units, test the compute units, and switch the traffic from old units to new units.

**Answer:** D

#### NEW QUESTION 104

- (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 105

- (Exam Topic 2)

Refer to the exhibit.

```

<rpc message-id="101" xmlns="urn:ietf:params:xml:ns:Netconf:base:1.0">
  <get-conflg>
    <source>
      <running/>
    </source>
    <filter>
      <interfaces xmlns=" urn:ietf:params:xml:ns:yang:ietf-interfaces">
        <interface>
          <name/>
        </interface>
      </interfaces>
    </filter>
  </get-config>
</rpc>

```

A network engineer uses model-driven programmability to monitor and perform changes on the network. The network engineer decides to use the NETCONF RPC message to complete one of their tasks. What is accomplished by sending the RPC message?

- A. The running-config of the device is returned.
- B. The name of each interface is reset to a default name.
- C. All the YANG capabilities supported by the device are returned.
- D. A list of interface names is returned.

**Answer: D**

#### NEW QUESTION 106

- (Exam Topic 2)

Which protocol must be allowed on the firewall so that NTP services work properly?

- A. ICMP
- B. BGP
- C. UDP
- D. TCP

**Answer: C**



**Explanation:**

Reference:

<https://www.cisco.com/c/en/us/support/docs/ip/network-time-protocol-ntp/108076-ntp-troubleshoot.html>**NEW QUESTION 108**

- (Exam Topic 2)

What is a benefit of organizing into modules?

- A. improves collaboration of the development team
- B. makes it easier to deal with large and complex systems
- C. enables the code to be broken down into layers
- D. enables the inclusion of more programming languages in the code

**Answer: B****Explanation:**

From Wikipedia ([https://en.wikipedia.org/wiki/Modular\\_programming](https://en.wikipedia.org/wiki/Modular_programming)) "Modular programming is closely related to structured programming and object-oriented programming, all having the same goal of facilitating the construction of large software programs and systems by decomposition into smaller pieces."

**NEW QUESTION 110**

- (Exam Topic 2)

Refer to the exhibit.

```
diff --git a/ciscoaxl/axl.py b/ciscoaxl/axl.py
index bc7727e..d66ef4d 100644
--- a/ciscoaxl/axl.py
+++ b/ciscoaxl/axl.py
@@ -99,7 +99,7 @@ class axl(object):
     :return: result dictionary
     """
     try:
-        return self.client.executeSQLUpdate(query)
+        return self.client.executeSQLUpdate(query) ['return']
     except Fault as e:
         return e

diff --git a/setup.py b/setup.py
index df79ef4..1470b05 100644
--- a/setup.py
+++ b/setup.py
@@ -5,7 +5,7 @@ with open("README.md", "r") as fh:

    setup(
        name="ciscoaxl",
-        version="0.14",
+        version="0.141",
        author="User 1",
        author_email="user1@example.com",
        description="Cisco CUCM AXL Library. Simple to use.",
```

Which two files are being edited in the unified diff? (Choose two.)

- A. README.md
- B. setup.py
- C. axl.py
- D. ciscoaxl.py
- E. index.py

**Answer: BC****NEW QUESTION 115**

- (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 120

- (Exam Topic 2)

```
HTTP/1.1 200 OK
Date: Mon, 27 Jul 2009 12:28:53 GMT
Server: nginx
Last-Modified: Wed, 22 Jan 2020 19:15:56 GMT
Content-Length: 88
Content-Type: application/json
Connection: keep-alive

{
  "id": "y123987jdkl",
  "status": "online",
  "type": "switch"
}
```

Which data is specified in the response header?

- A. {"id": "y123987jdkl". HTTP/1.1 200 OK"status: "online", "type": "switch"}
- B. HTTP/1.1 200 OK
- C. "type", "switch"
- D. Content-Type

**Answer: B**

# NEW QUESTION 125

- (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/Y2LzY29zcGFiYzov371508156INISVAvOTJmM2RkOWEiNjc1ZC00YTQxLTljNDExMmFiZGY4OWY0NGY0QjExNzJkNmYwLTJlY2M0MTFhOS1iOWI3LWNmMjg3MTJhYTgzNw"

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 127

- (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. Y2IzY29zcGFyYXovL3VzL1JPT00vYmJj

**mentionedPeople**  
e.g. Y2IzY29zcGFyYXovL3VzL1BFT1BMRS6

**before**  
e.g. 2016-04-2Tf-9:01:55:966Z

**beforeMessage**  
e.g. Y2IzY29zcGFyYXovL3VzL1FU1NBROL

**max**  
e.g. 100

[Run](#)

```
bash-3.2$ curl -H "Content-Type: application/json" -H "Authorization: Fj2zzzykEa091ic9GK2j8LtE1HklH6oRHPQdw1Pat60i7ndtHHnWzL2b5pqMg14Kk_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 128

- (Exam Topic 1)

What should a CI/CD pipeline aim to achieve?

- A. to allow manual testing before deployment
- B. to require minimal manual interaction
- C. to support new deployments on a fixed monthly schedule
- D. to provide a documented process for feedback

Answer: A

#### NEW QUESTION 132



- (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 OTVjNDk5ZGQtNDc5Yi00MwZGZlZGINDYNzdh_PF84_consumer	

Body

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

Status: 400 Bad Request Time: 173 ms Size: 514 B

Body Cookies Headers (9) Test Results

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 137

- (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 140

- (Exam Topic 1)  
Which action resolves a 401 error in response to an HTTP GET that is issued to retrieve statement using RESTCONF on a CSR 1000V?

- A. Change the HTTP method to PUT.
- B. Change the transport protocol to HTTPS.
- C. Check the MIME types in the HTTP headers.
- D. Check the authentication credentials.

Answer: D

#### NEW QUESTION 142

- (Exam Topic 1)  
What are two advantages of version control software? (Choose two.)

- A. It supports tracking and comparison of changes in binary format files.
- B. It allows old versions of packaged applications to be hosted on the Internet
- C. It provides wiki collaboration software for documentation.
- D. It supports comparisons between revisions of source code files.
- E. It allows new team members to access the current code and history.

Answer: DE

#### NEW QUESTION 147

- (Exam Topic 1)  
Which API is used to obtain data voicemail ports?

- A. Finesse gadgets
- B. Cisco Unified Communications manager

- C. Webex devices
- D. Webex teams

**Answer:** B

**Explanation:**

Cisco Unified Communications Manager (CUCM) provides API access to data management, call management, and voicemail integration. Source: Cisco DevNet Fundamental Course: <https://developer.cisco.com/certification/fundamentals/>

**NEW QUESTION 151**

- (Exam Topic 1)

Drag and drop the capability on the left onto the Cisco compute management platform that supports the capability on the right.

Multi-Cloud automation and orchestration platform for Cisco and third-party servers, networks, storage, and converged infrastructure.	UCS Manager
Software as a Service Platform that enables Cisco infrastructure management, automation and orchestration from anywhere.	UCS Director
Embedded software that enables Cisco server, fabric, and storage provisioning.	Intersight

- A. Mastered
- B. Not Mastered

**Answer:** A

**Explanation:**

Multi-Cloud automation and orchestration platform for Cisco and third-party servers, networks, storage, and converged infrastructure.	Embedded software that enables Cisco server, fabric, and storage provisioning.
Software as a Service Platform that enables Cisco infrastructure management, automation and orchestration from anywhere.	Multi-Cloud automation and orchestration platform for Cisco and third-party servers, networks, storage, and converged infrastructure.
Embedded software that enables Cisco server, fabric, and storage provisioning.	Software as a Service Platform that enables Cisco infrastructure management, automation and orchestration from anywhere.

**NEW QUESTION 152**

- (Exam Topic 1)

Which device is a system that monitors and controls incoming and outgoing network traffic based on predetermined security rules?

- A. Switch
- B. Router
- C. Firewall
- D. Load balancer

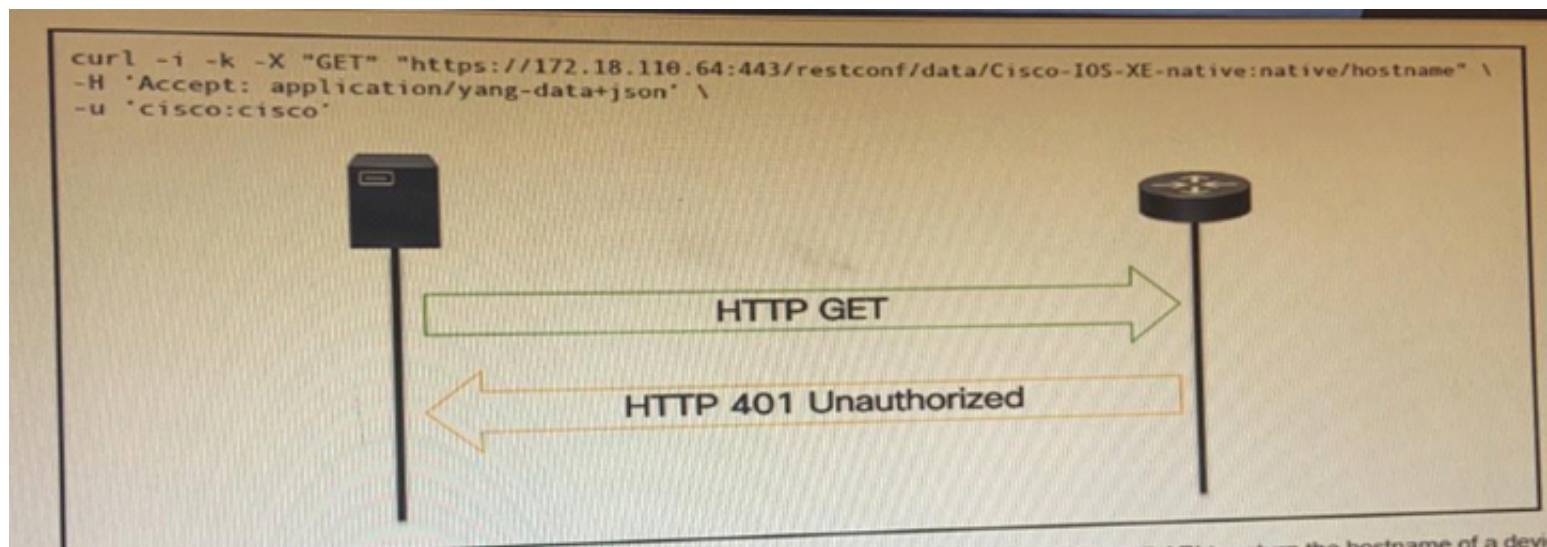
**Answer:** C

**NEW QUESTION 153**

- (Exam Topic 1)

Refer to the exhibit.





An administrator attempts to perform a GET using the Cisco IOS XE RESTCONF API to return the hostname of a device. The sequence diagram illustrated the HTTP message observed. Which change to the API request resolves the issue?

- A. Add Content-Type HTTP header with 'application/yang-data+json' using -H 'Content-Type: application/yang-data+json'.
- B. Use -u cisco: cisco instead of -u 'cisco: cisco'.
- C. Change the request method from -X "GET" to- X' POST".
- D. Remove the -H 'Accept: application/yang-data+json' HTTP header because it is not required.

Answer: B

#### NEW QUESTION 158

- (Exam Topic 1)

Refer to the exhibit.

```
module ex-ethernet {
  namespace "http://example.com/Ethernet";
  prefix "eth";
  import ietf-interfaces {
    prefix if;
  }
  augment "/if:interfaces/if:interface" {
    when "if:type = 'ethernetCsmacd'";
    container ethernet {
      must "../if:location" {
        description
          "An Ethernet interface must specify the physical location of the ethernet hardware.";
      }
      choice transmission-params {
        case auto {
          leaf auto-negotiate {
            type empty;
          }
        }
        case manual {
          leaf duplex {
            type enumeration {
              enum "half";
              enum "full";
            }
          }
          leaf speed {
            type enumeration {
              enum "10Mb";
              enum "100Mb";
              enum "1Gb";
              enum "10Gb";
            }
          }
        }
      }
    }
  }
  // other ethernet specific params...
}
```

What is represented in this YANG module?

- A. interface management
- B. topology
- C. BGP
- D. OpenFlow

Answer: A

#### NEW QUESTION 163

- (Exam Topic 1)

Which action does the Git command git merge allow the development to perform?

- A. Combine multiple sequence of commits into one unified history.
- B. Push changes to the remote repository
- C. Switch between branches



D. Create, list, rename, and delete branches

**Answer:** A

**Explanation:**

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

#### NEW QUESTION 166

- (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 168

- (Exam Topic 1)

In which situation would an edge computing solution be used?

- A. where low latency is needed
- B. where high CPU throughput is needed
- C. where fast memory is needed
- D. where high disk space is needed

**Answer:** A

#### NEW QUESTION 172

- (Exam Topic 1)

What are two characteristics of Bare Metal environments that are related to application deployment? (Choose two.)

- A. Provide the hypervisor to host virtual servers
- B. Specifically designed for container-based workloads.
- C. Provides workloads with access to hardware features
- D. Suitable for legacy application that do not support virtualization
- E. Not compatible with other cloud services such as PaaS or SaaS offerings.

**Answer:** CD

#### NEW QUESTION 175

- (Exam Topic 1)

Drag and drop the element of the Finesse API on the left onto the description of its functionality on the right.

User	Represents a skill group in Unified CCE.
Dialog	Represents the current state of the system.
Media	Represents an agent, supervisor or administrator.
Queue	Represents a group of users.
Team	Represents a call and the participants if the media type is voice.
SystemInfo	Sends client-side logging to the Finesse Server.
ClientLogs	Represents a user's state in a non-voice Media Routing Domain.

- A. Mastered
- B. Not Mastered

**Answer:** A

#### Explanation:

1 – D, 2 – F, 3 – A, 4 – E, 5 – B, 6 – G, 7 - C

#### NEW QUESTION 180

- (Exam Topic 1)

Drag and drop the HTTP methods from the left onto their generally accepted corresponding create, read, update, and delete operations on the right.

DELETE	Create
GET	Read
PATCH	Update
POST	Update
PUT	Delete

- A. Mastered
- B. Not Mastered

**Answer:** A

**Explanation:**

1 – D, 2 – B, 3 – C, 4 – E, 5 – A

Reference:

<https://www.cisco.com/c/en/us/td/docs/cloud-systems-management/application-policy-infrastructure-controller-e>

OR

Answer : Post

Get Put Delete

**NEW QUESTION 184**

- (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 187**

- (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 191

- (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 193

- (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 196

- (Exam Topic 1)

What is an example of a network interface hardware address?

- A. domain name
- B. IP address
- C. workstation name
- D. MAC address

**Answer:** D

#### NEW QUESTION 201

- (Exam Topic 1)

Users cannot access a webserver and after the traffic is captured, the capture too\* shows an ICMP packet that reports "communication administratively prohibited"  
What Is the cause of this webserver access Issue?

- A. An access list along the path is blocking the traffic
- B. The traffic is not allowed to be translated with NAT and dropped.
- C. Users must authenticate on the webserver to access It
- D. A router along the path is overloaded and thus dropping traffic

**Answer:** A

#### NEW QUESTION 205

- (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 mut be at fault?

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

**Answer:** D

#### NEW QUESTION 210

- (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 inter actions
- 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 213

- (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 217

- (Exam Topic 1)

Which two statements about JSON and XML are true? (Choose two.)

- A. JSON objects are collection of key value pair.
- B. The syntax of JSON contains tags, elements, and attributes.
- C. JSON arrays are an unordered set of key value pairs.
- D. The syntax of XML contains tags, elements, and attributes.

E. XML objects are collections of key-value pairs.

**Answer:** AD

#### NEW QUESTION 221

- (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 224

- (Exam Topic 1)

Refer to the exhibit.

```
List the networks in a Meraki organization:

GET https://api.meraki.com/api/v0/organizations/<org_id>/networks
Response code: 200
Response body: [ {
  "id": <network_id>,
  "name": "Test Network",
  "organization_id": <new_org_id>,
  "type": "wireless",
  "timeZone": "America/Los_Angeles",
  "tags": " test "
} ]
```

Fill in the blanks to complete the cURL command to the list of networks in the Meraki organization with an id of 384279060

```
curl -X GET -L \
--url https://api.meraki.com/api/v0/[ ]/[ ]/[ ] \
-H 'X-Cisco-Meraki-API-Key: '$meraki_api_key'
```

- A. Mastered
- B. Not Mastered

**Answer:** A

#### Explanation:

```
"organization_id": <new_org_id>,
"type": "wireless",
"timeZone": "America/Los_Angeles",
"tags": " test "
} ]
```

t. Fill in the blanks to complete the cURL command to list the networks in the Meraki organization with an Id of 384279060:

```
meraki.com/api/v0/[organizations] / [384279060] / [networks] \
ki-API-Key: '$meraki_api_key'
```

#### NEW QUESTION 225

- (Exam Topic 1)

Which two statement describe the role of an artifact repository in a CI/CD pipeline? (Choose two.)

- A. An artifact repository allows to compare and merge changes in the source code of files involved in a build process.
- B. An artifact repository is needed only for CI/CD pipeline executed on a public cloud infrastructure.
- C. An artifact repository provides traceability, search, and management of binary files.
- D. An artifact repository is needed only for managing open source software.
- E. An artifact repository stores files needed and generated during the build process.

**Answer:** CE

#### NEW QUESTION 227



- (Exam Topic 1)  
what is an advantage of a version control system?

- A. forces the practice of trunk-based development
- B. prevents over-writing code or configuration files
- C. facilitates resolving conflicts when merging code
- D. ensures that unit tests are written

**Answer:** C

#### NEW QUESTION 231

- (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 235

- (Exam Topic 1)  
What are two advantages of the Model-view-controller software design pattern? (Choose two.)

- A. simplifies network automation
- B. allows for multiple views of the same model
- C. makes code easier to deploy using CI/CD pipelines
- D. reduces need for error handling
- E. separates responsibilities of the code, which makes future modifications easier

**Answer:** BE

#### NEW QUESTION 239

- (Exam Topic 1)  
Drag and drop the network automation interfaces from the left onto the transport protocols that they support on the right. Not all options are used.

SSH	gRPC
HTTP	
HTTP/2	NETCONF
HTTPS	RESTCONF

- A. Mastered
- B. Not Mastered

**Answer:** A

#### Explanation:

SSH	gRPC
HTTP	HTTP/2
HTTP/2	NETCONF
HTTPS	SSH
	RESTCONF
	HTTPS

#### NEW QUESTION 240

- (Exam Topic 1)

Which platform has an API that be used to obtain a list of vulnerable software on user devices?

- A. Cisco Umbrella
- B. Cisco Firepower
- C. Cisco Identity Services Engine
- D. Cisco Advanced Malware Protection

**Answer:** D

#### NEW QUESTION 242

- (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 244

- (Exam Topic 1)

Which two statements are true about Cisco UCS manager, Cisco Intersight APIs? (Choose two.)

- A. Cisco Intersight API interactions can be encoded in XML or JSON and require an APIs key in the HTTP header for authentication.
- B. USC Director API interactions can be XML- or JSON-encoded and require an APLs key in the HTTP header for authentication.
- C. UCS manager API interactions are XML-encoded and require a cookie in the method for authentication.
- D. Cisco Intersight uses XML to encoded API interactions and requires an API key pair for authentication.
- E. UCS manager uses JSON to encode API interactions and utilizes Base64-encoded credentials in the HTTP header for authentication.

**Answer:** BC

#### Explanation:

Reference:

[https://www.cisco.com/c/en/us/td/docs/unified\\_computing/ucs/ucs-director/rest-api-getting-started-guide/6-5/cis](https://www.cisco.com/c/en/us/td/docs/unified_computing/ucs/ucs-director/rest-api-getting-started-guide/6-5/cis)

[https://www.cisco.com/c/en/us/td/docs/unified\\_computing/ucs/sw/api/b\\_ucs\\_api\\_book.pdf](https://www.cisco.com/c/en/us/td/docs/unified_computing/ucs/sw/api/b_ucs_api_book.pdf)

#### NEW QUESTION 248

- (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 251

- (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 255

- (Exam Topic 1)

Refer to the exhibit.

## List Rooms

List rooms.

The `title` of the room for 1:1 rooms will be the display name of the other person.

By default, lists rooms to which the authenticated user belongs.

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

**GET** `/v1/rooms`

## Query Parameters

Name	Description
<code>teamId</code> string	List rooms associated with a team, by ID.
<code>type</code> string	List rooms by type. <i>Possible values: direct, group</i>
<code>sortBy</code> string	Sort results. <i>Possible values: id, lastactivity, created</i>
<code>max</code> number	Limit the maximum number of rooms in the response.  Default: <code>100</code>

Fill in the blank to complete the query parameter and value so that the result set is returned in reverse chronological order (most recent first) based on when message were entered.

HTTP GET `/v1/rooms` \_\_\_\_\_

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

HTTP GET `/v1/rooms` `?sortBy=lastactivity`

## NEW QUESTION 258

- (Exam Topic 1)

Which way should be used to safely the API keys?

- A. In an environment variable unique to the system database
- B. Encrypted in a configuration file that is separate from the code
- C. Encrypted in the code in a function
- D. Plain text in the code as a constant

Answer: B

## NEW QUESTION 262

- (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 $(cat $f) $(cat $f | openssl sha -sha256 -r < $f | cut -f1 -d' ')
done
```

#### NEW QUESTION 265

- (Exam Topic 1)

Which two elements are foundational principles of DevOps? (Choose two.)

- A. designing applications as microservices
- B. encouraging containers for the deployment of applications
- C. organizing cross-functional teams over organizational silos
- D. optimizing the cost of infrastructures
- E. automating over documenting

**Answer:** CE

#### NEW QUESTION 267

- (Exam Topic 1)

Which statement about authentication a RESTCONF API session with a router that runs Cisco IOS XE software is true?

- A. OAuth must be used.
- B. A token must be retrieved and the associated string must be embedded in the X-Auth-Token header.
- C. Basic authentication must be used.
- D. No authentication is required.

**Answer:** C

#### NEW QUESTION 268

- (Exam Topic 1)

An application calls a REST API and expects a result set of more than 550 records, but each time the call is made, only 25 are returned. Which feature limits the amount of data that is returned by the API?

- A. pagination
- B. payload limit
- C. rate limiting
- D. service timeouts

**Answer:** A

#### NEW QUESTION 273

- (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 276

- (Exam Topic 1)

Which two statements describe the advantages of using a version control system? (Choose two.)

- A. It allows for branching and merging so that different tasks are worked on in isolation before they are merged into a feature or master branch.
- B. It allows multiple engineers to work against the same code and configuration files and manage differences and conflicts.
- C. It provides tooling to automate application builds and infrastructure provisioning.
- D. It allows developers to write effective unit tests.
- E. It provides a system to track User Stories and allocate to backlogs.

**Answer:** AB

#### NEW QUESTION 281

- (Exam Topic 1)

What is the purpose of a firewall in application deployment?

- A. adds TLS support to an application that does not support it natively
- B. forwards traffic to a pool of instances of the application
- C. provides translation for an application's hostname to its IP address
- D. limits traffic to only ports required by the application

Answer: D

#### NEW QUESTION 285

- (Exam Topic 1)

Drag and drop the network automation interfaces from the left onto the transport protocols that they support on the right. (Not all Options are used)

SSH	gRPC
HTTP	
HTTP/2	NETCONF
HTTPS	
	RESTCONF

- A. Mastered
- B. Not Mastered

Answer: A

#### Explanation:

Grpc == http/2 , netconfig == ssh , restconfig == https

#### NEW QUESTION 286

- (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 289

- (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/v1/network-device/](https://DNA-c_API_ADDRESS/api/v1/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/](https://DNA-c_API_ADDRESS/api/v1/network-device/) and receive the network device list in JSON format

#### NEW QUESTION 290

- (Exam Topic 1)

Refer to the exhibit.

```
<books>
  <science>
    <biology>10.00</biology>
    <geology>9.00</geology>
    <chemistry>8.00</chemistry>
  </science>
  <math>
    <calculus>20.00</calculus>
    <algebra>12.00</algebra>
  </math>
</books>
```

Which JSON is equivalent to the XML –encoded data?

A. [ {

```
  "books": {
    "science": {
      "biology": "10.00",
      "geology": "9.00",
      "chemistry": "8.00"
    },
    "math": {
      "calculus": "20.00",
      "algebra": "12.00"
    }
  }
} ]
```

B. {

```
  "books": [
    "science": {
      "biology": "10.00",
      "geology": "9.00",
      "chemistry": "8.00"
    },
    "math": {
      "calculus": "20.00",
      "algebra": "12.00"
    }
  ]
}
```

C. {

```
  "books": [
    "science": {
      "biology": "10.00",
      "geology": "9.00",
      "chemistry": "8.00"
    },
    "math": {
      "calculus": "20.00",
      "algebra": "12.00"
    }
  ]
}
```



```
D. {
  "books": [
    "science", {
      "biology": "10.00",
      "geology": "9.00",
      "chemistry": "8.00"
    },
    "math", {
      "calculus": "20.00",
      "algebra": "12.00"
    }
  ]
}
```

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

Answer: A

NEW QUESTION 294

- (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

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

Public Cloud

Private Cloud

Hybrid Cloud

Edge Computing

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

1 – B, 2 – E, 3 – C, 4 – D, 5 – A

NEW QUESTION 298

- (Exam Topic 1)

Drag and drop the Docker file instructions from the onto correct 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:

1 – E, 2 – B, 3 – D, 4 – A

### NEW QUESTION 302

- (Exam Topic 1)

Refer to the exhibit.

```
{
  "items": [
    {
      "kind": "object#NetworkObj",
      "selfLink": "https://10.201.230.5/api/objects/networkobjects/db01",
      "name": "db01",
      "host": {
        "kind": "IPv4address",
        "value": "172.16.0.11"
      },
      "objectId": "db01"
    }
  ]
}
```

The JSON data in the exhibit has been parsed and stored in a variable, "data". What returns the value "172.16.0.11" ?

- A. data['items'][0]['host']['value']  
 B. data['items'][1]['host']['value']  
 C. data['items']['host'][1]  
 D. data['items']['host']['value']

Answer: A

### NEW QUESTION 305

- (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/>

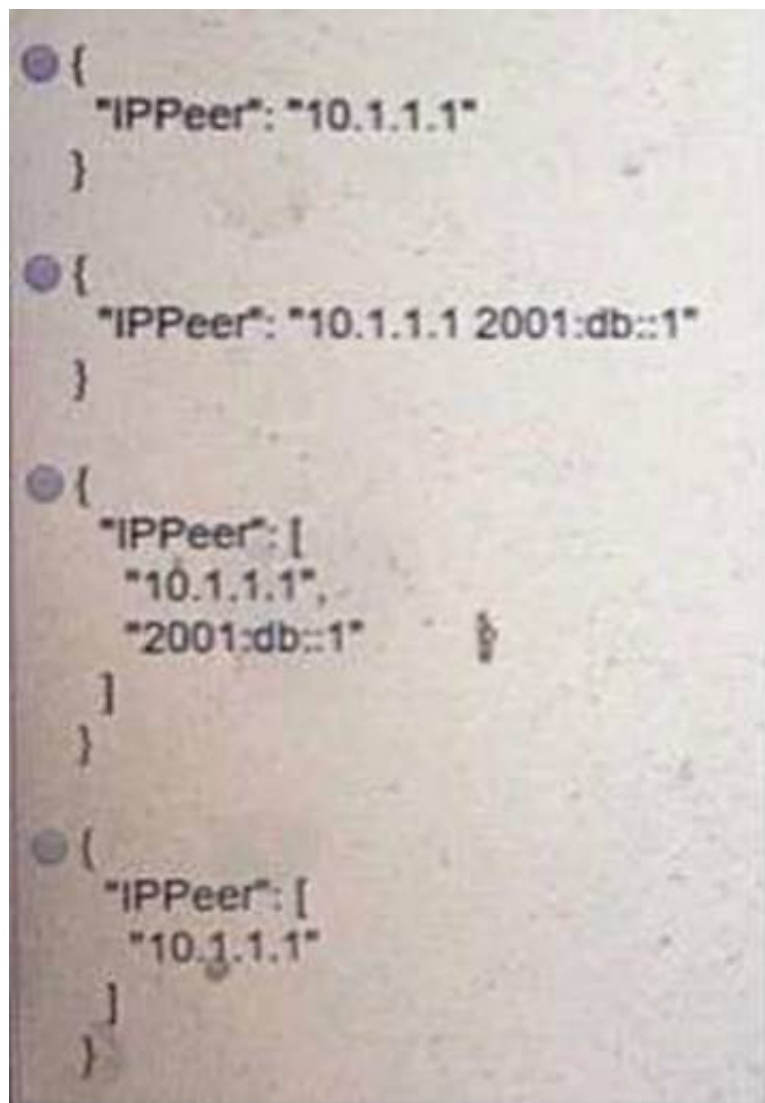
### NEW QUESTION 306

- (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 310**

- (Exam Topic 1)

On which port does NETCONF operate by default?

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

**Answer:** D

**NEW QUESTION 312**

- (Exam Topic 1)

Which mechanism is used to consume a RESTful API design when large amounts of data are returned?

- A. Data sets
- B. Scrolling
- C. Blobs
- D. Pagination

**Answer:** D

**Explanation:**

Reference: <https://nordicapis.com/everything-you-need-to-know-about-api-pagination/>

**NEW QUESTION 317**

- (Exam Topic 1)

Which two NETCONF operations cover the RESTCONF GET operation? (Choose two.)

- A. <get>
- B. <edit>
- C. <get-update>
- D. <modify-config>
- E. <get-config>

**Answer:** AE



**Explanation:**

Reference:

<https://www.cisco.com/c/en/us/support/docs/storage-networking/management/200933-YANG-NETCONF-Conf>

**NEW QUESTION 318**

- (Exam Topic 1)

Which REST architectural constraint indicates that no client context should be stored on the server between requests?

- A. stateless
- B. uniform interface
- C. cacheable
- D. client-server

**Answer:** A

**Explanation:**

Reference: <https://developer.cisco.com/docs/nx-os/#!representational-state-transfer-rest>

**NEW QUESTION 319**

- (Exam Topic 1)

What is the first development task in test-driven development?

- A. Write code that implements a desired function.
- B. Write a failing test case for a desired function.
- C. Write a passing test case for existing code.
- D. Reverse engineer the code for a desired function.

**Answer:** B

**Explanation:**

Reference:

<https://technologyconversations.com/2013/12/20/test-driven-development-tdd-example-walkthrough/>

**NEW QUESTION 324**

- (Exam Topic 1)

Which two descriptions can be given to an application that is interacting with a webhook? (Choose two.)

- A. Processor
- B. Codec
- C. Listener
- D. Receiver
- E. Transaction monitor

**Answer:** CD

**NEW QUESTION 326**

- (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 330**

- (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 335

- (Exam Topic 1)

Which line is an example of the start of a chunk from a unified diff?

- A. @@ -90,88 +20191008T1349@@
- B. @@ -20191007T1200 +88,90 @@
- C. @@ -20191007T1200 +20191008T1349@@
- D. @@ -88,10 +88,6 @@

**Answer:** D

**Explanation:**

Reference:

<https://unix.stackexchange.com/questions/252927/what-do-the-numbers-in-the-line-mean-in-output-of-diff>

#### NEW QUESTION 338

- (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 342

- (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 344

- (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://sandboxdnac2.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://sandboxdnac2.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

#### NEW QUESTION 347

- (Exam Topic 3)

What is a characteristic of the Cisco Finesse platform?

- A. Applications allow services to be invoked on a network triggered event.  
 B. The platform provides a ready-to-go platform for HD video and audio conferencing.  
 C. Applications are added to the platform from the desktop remotely.  
 D. The platform includes an enterprise-class IM engine.

Answer: A

Explanation:

A characteristic of the Cisco Finesse platform is that applications allow services to be invoked on a network triggered event. Cisco Finesse is a next-generation agent and supervisor desktop designed to provide a rich, browser-based experience for contact center agents and supervisors. It offers a flexible, open development platform that allows developers to build custom applications and integrations to meet the specific needs of their contact center. One of the key features of Cisco Finesse is the ability to trigger actions based on events within the contact center network, such as an incoming call or a change in the status of a customer's account. This allows developers to build applications that can react to real-time events and provide relevant information or services to agents as they handle customer interactions.

**NEW QUESTION 351**

- (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 352**

- (Exam Topic 3)

Which HTTP method is used by webhooks and notifies a listener about an event change?

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

**Answer: B****NEW QUESTION 356**

- (Exam Topic 3)

Refer to the exhibit.

```
1  <routing xmlns="urn:ietf:params:xml:ns:yang:ietf-routing">
2    <routing-instance>
3      <name>default</name>
4      <description>default-vrf [read-only]</description>
5      <routing-protocols>
6        <routing-protocol>
7          <type xmlns:ospf="urn:ietf:params:xml:ns:yang:ietf-
*         ospf">ospf:ospfv2</type>
8          <name>100</name>
9          <ospf xmlns="urn:ietf:params:xml:ns:yang:ietf-ospf">
10         <instance>
11           <af xmlns:rt="urn:ietf:params:xml:ns:yang:ietf-
*          routing">rt:ipv4</af>
12           <router-id>1.1.1.1</router-id>
13           <nsr>
14             <enable>false</enable>
15           </nsr>
16           <auto-cost>
17             <enable>false</enable>
18           </auto-cost>
19           <redistribution
*          xmlns="urn:ietf:params:xml:ns:yang:cisco-ospf">
20             <rip/>
21           </redistribution>
22         </instance>
23       </ospf>
24     </routing-protocol>
25   </routing-protocols>
26 </routing-instance>
27 </routing>
```

What are two characteristics of the NETCONF response? (Choose two.)

- A. ospf is defined by the ietf-ospf module.
- B. ietf-ospf imports ietf-routing.
- C. redistribution is a module of type cisco-ospf.
- D. routing protocols is a list.
- E. The main module is routing.

**Answer: BC****NEW QUESTION 361**

- (Exam Topic 3)

Which technology is responsible for matching a name to an IP address of an application running on a host?

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

**Answer: D**

NEW QUESTION 366

- (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:

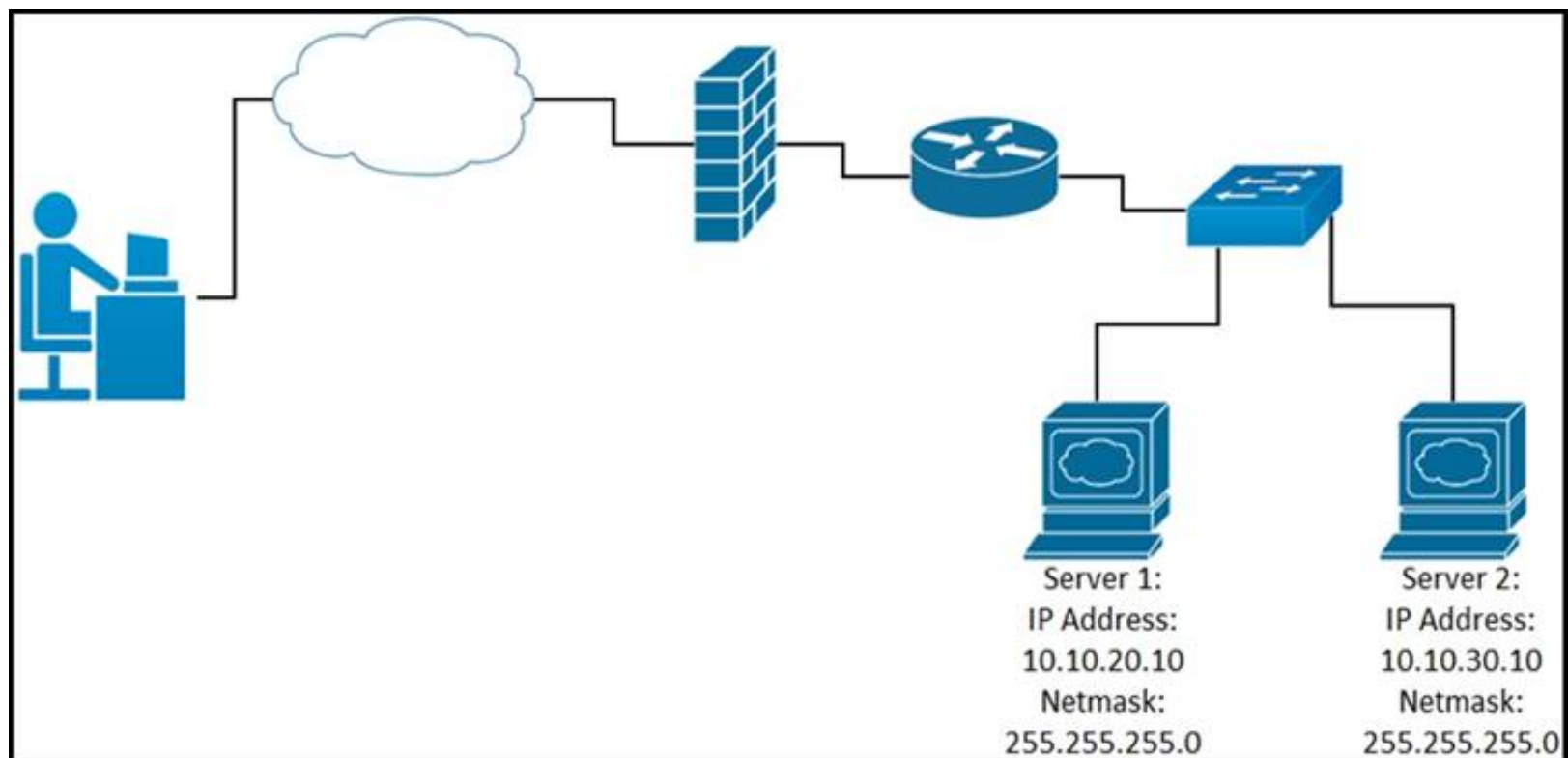
document author	initializes a new build stage
command to execute	document author
initializes a new build stage	command to execute
copies new files or directories	
sets the userid	

NEW QUESTION 367

- (Exam Topic 3)

Refer to the exhibit.





While developing a Cisco Webex bot, an application reaches the public IP address of the firewall, but traffic is forwarded to the IP address of server 1 instead of the IP address of server 2. What causes this issue?

- A. The proxy server that rewrites traffic is misconfigured.
- B. The router is sending the traffic to server 1 instead of server 2.
- C. The switch is forwarding IP traffic to the wrong VLAN.
- D. NAT is misconfigured on the firewall.

**Answer: D**

#### NEW QUESTION 372

- (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 376

- (Exam Topic 3)

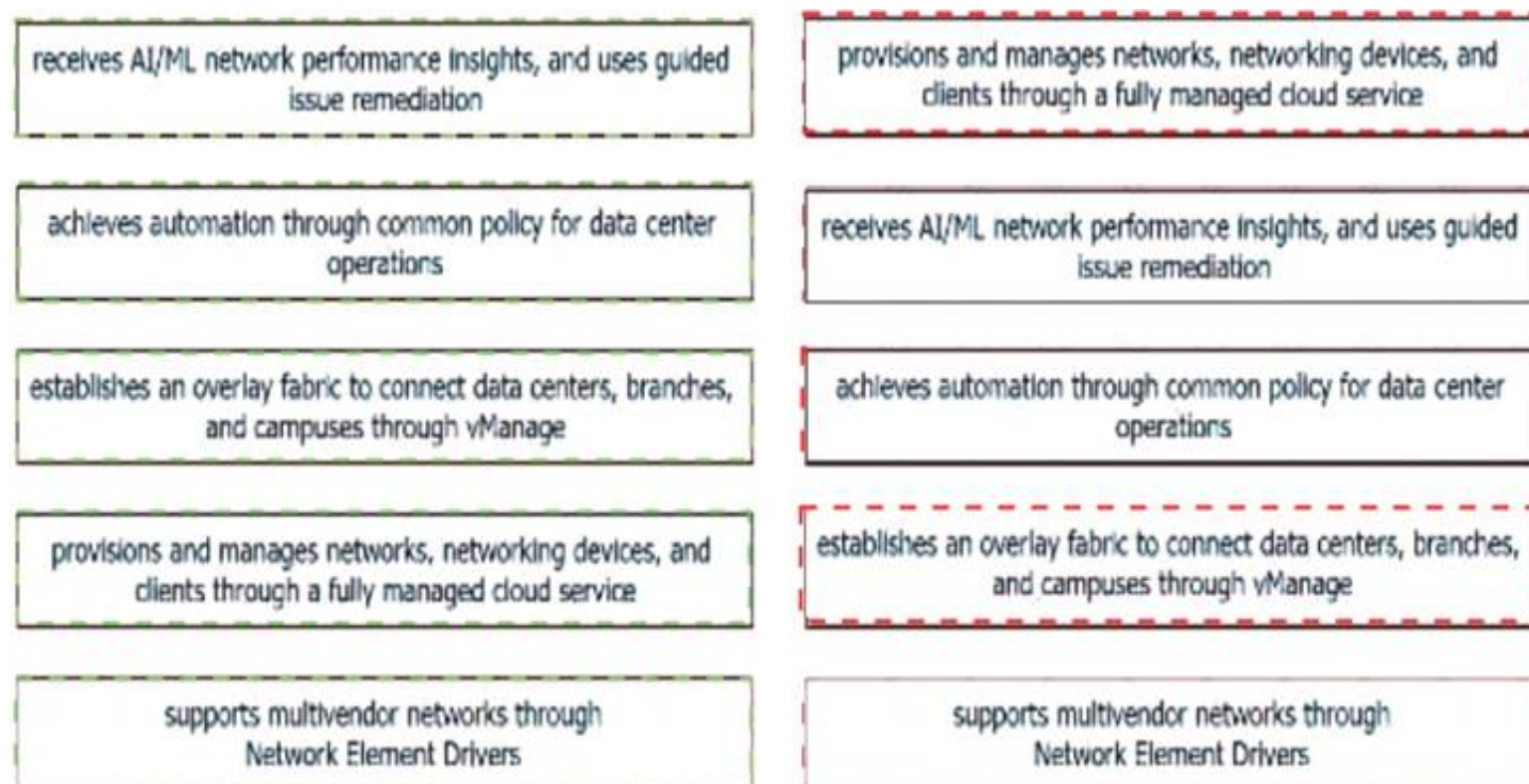
Drag and drop the capabilities from the left onto the Cisco Network Management Platforms that support the capabilities on the right.

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:**



#### NEW QUESTION 381

- (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 386

- (Exam Topic 3)

A company deploys an application via containers in its local data center. As soon as the application goes into production, it starts to crash at specific hours of the day. After investigation, it is concluded that the crashes are due to too many users accessing the application simultaneously. The spikes must be addressed and allow for future growth without discarding the investment already made. Which deployment model must be used?

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

Answer: A

#### NEW QUESTION 391

- (Exam Topic 3)

```
$ find /home/user/backup -mtime +30 -type f -print
$ find /home/user/backup -mtime +30 -type f -delete
```

Refer to the exhibit. An engineer is managing the network of an enterprise. The network is using a distributed deployment model. The enterprise uses database to store logs. The current policy requires logs to be stored if changes are made to the infrastructure in any of the devices on the data centers. Which workflow is being automated by the Bash script?

- A. returning backup files that are older than 30 days
- B. deleting backup files that are older than 30 days
- C. configuring the directory to delete files automatically
- D. automating deletion of all backup files every 30 days

Answer: B

#### NEW QUESTION 396

- (Exam Topic 3)

Drag and drop the functions from the left onto the networking devices on the right.

forwards by default	load balancer
distributes unicast traffic over devices	switch
uses traffic inspection to make forwarding decisions	firewall
distributes multicast traffic over devices	router

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

forwards by default	forwards by default
distributes unicast traffic over devices	distributes unicast traffic over devices
uses traffic inspection to make forwarding decisions	uses traffic inspection to make forwarding decisions
distributes multicast traffic over devices	distributes multicast traffic over devices

NEW QUESTION 398

- (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 403

```
---
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 408

- (Exam Topic 3)

```
HTTPS/1.1 201 Created
Date: Tue, 08 Nov 2020 09:37:27 GMT
Server: example-server
Location: https://example.com/restconf/data\
          example-jukebox/library/dogbreed=Australian%20Cattle%20Dog
Last Modified: Tue 08 Nov 2020 09:37:27 GMT
ETag: "s1878124t4c"
```

Refer to the exhibit. Which RESTCONF request results in this response?

A.

```
GET /restconf/data/example-jukebox:jukebox/library HTTP/1.1
Host: example.com
Content-Type: application/yang-data-json

{
  "Example-jukebox:dogbreed" : [
    {
      "name" : "Australian Cattle Dog"
    }
  ]
}
```

B. CONFIG /restconf/data/example-jukebox:jukebox/library HTTP/1.1

```
Host: example.com
Content-Type: application/yang-data-json

{
  "Example-jukebox:dogbreed" : [
    {
      "name" : "Australian Cattle Dog"
    }
  ]
}
```

C. PUT /restconf/data/example-jukebox:jukebox/library HTTP/1.1

```
Host: example.com
Content-Type: application/yang-data-json

{
  "Example-jukebox:dogbreed" : [
    {
      "name" : "Australian Cattle Dog"
    }
  ]
}
```

D. POST /restconf/data/example-jukebox:jukebox/library HTTP/1.1

```
Host: example.com
Content-Type: application/yang-data+json

{
  "Example:dogbreed" : [
    {
      "name" : "Australian Cattle Dog"
    }
  ]
}
```

Answer: D

#### NEW QUESTION 413

- (Exam Topic 3)

Which action do webhooks enable an application to perform?

- A. Increase the request rate limit.
- B. Populate the application with restricted data.
- C. Receive real-time data.
- D. Implement a push model.

Answer: D

#### Explanation:

Simplifying the wording: Webhook enables the app to ( push or receive real time) . The clients should receive real time but the app pushes.

#### NEW QUESTION 417

- (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 419

- (Exam Topic 3)

### CISCO SECURITY APIS

Introduction

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

## Cisco Security APIs

The main goal of this collection to help the developer understand the various API capabilities of Cisco NGFW, 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

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. ("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 420

- (Exam Topic 3)

```
--- functions.py 2020-09-26 14:26:25.000000000 -0600
--- new.py 2020-09-26 14:26:10.000000000 -0600
@@ -21,7 +21,7 @@
def print_devices_info(devices):
    # Print id, hostname and management IP
    for item in devices:
        print(item['id'], item['hostname'], item['managementIpAddress'])
        print(item['id'], item['hostname'])

    # Get Authentication token
    def get_dnac_jwt_token():
@@ -66,9 +66,15 @@
    response = get_devices_list(headers, {})
    print_devices_info(response)

    # print devices list filtered by hostname
    print('\nPrinting device list filtered by hostname ...')
    query_string_params = {'hostname': 'CSR1Kv-01.devnet.local'}
    response = get_devices_list(headers, query_string_params)
    print_devices_info(response)

    # print devices list filtered by platform Id
    print('\nPrinting device list filtered by platform id...')
    query_string_params = {'platformId': 'C9500-40X'}
    query_string_params = {'platformId': 'AIR-AP1141N-A-K9'}
    response = get_devices_list(headers, query_string_params)
    print_devices_info(response)
```

Refer to the exhibit. An engineer is comparing two files by using the unified diff format. Which code snippet belongs to the new.py file?

- 77 query\_string\_params = {'platformId': 'AIR-AP1141N-A-K9'}
- 21 print(item['id'], item['hostname'])
- 24 print(item['id'], item['hostname'], item['managementIpAddress'])
- 66 # print devices list filtered by hostname  
67 print('\nPrinting device list filtered by hostname ...')  
68 query\_string\_params = {'hostname': 'CSR1Kv-01.devnet.local'}  
69 response = get\_devices\_list(headers, query\_string\_params)  
70 print\_devices\_info(response)

Answer: A

#### NEW QUESTION 425

- (Exam Topic 3)

```

- hosts: nxos_rtr
  gather_facts: false
  tasks:
    - nxos_hsrp:
      group: "{{ item.group }}"
      vip: "{{ item.vip }}"
      priority: 115
      interface: "{{ item.interface }}"
      preempt: enabled
      auth_type: md5
      auth_string: "s3cuR3"
      version: 2
      host: "{{ hostvars['rtr-1a']['ansible_ssh_host'] }}"
      with_items:
        - "{{ hsrp_groups }}"
      delegate_to: "{{ hostvars['srv-1a']['ansible_ssh_host'] }}"

```

Refer to the exhibit. An engineer runs a network that consists of Cisco Nexus devices. The network is distributed between data centers in different locations. The switches are configured using standalone connections and a single point of failure. Which process is being automated by the Ansible playbook?

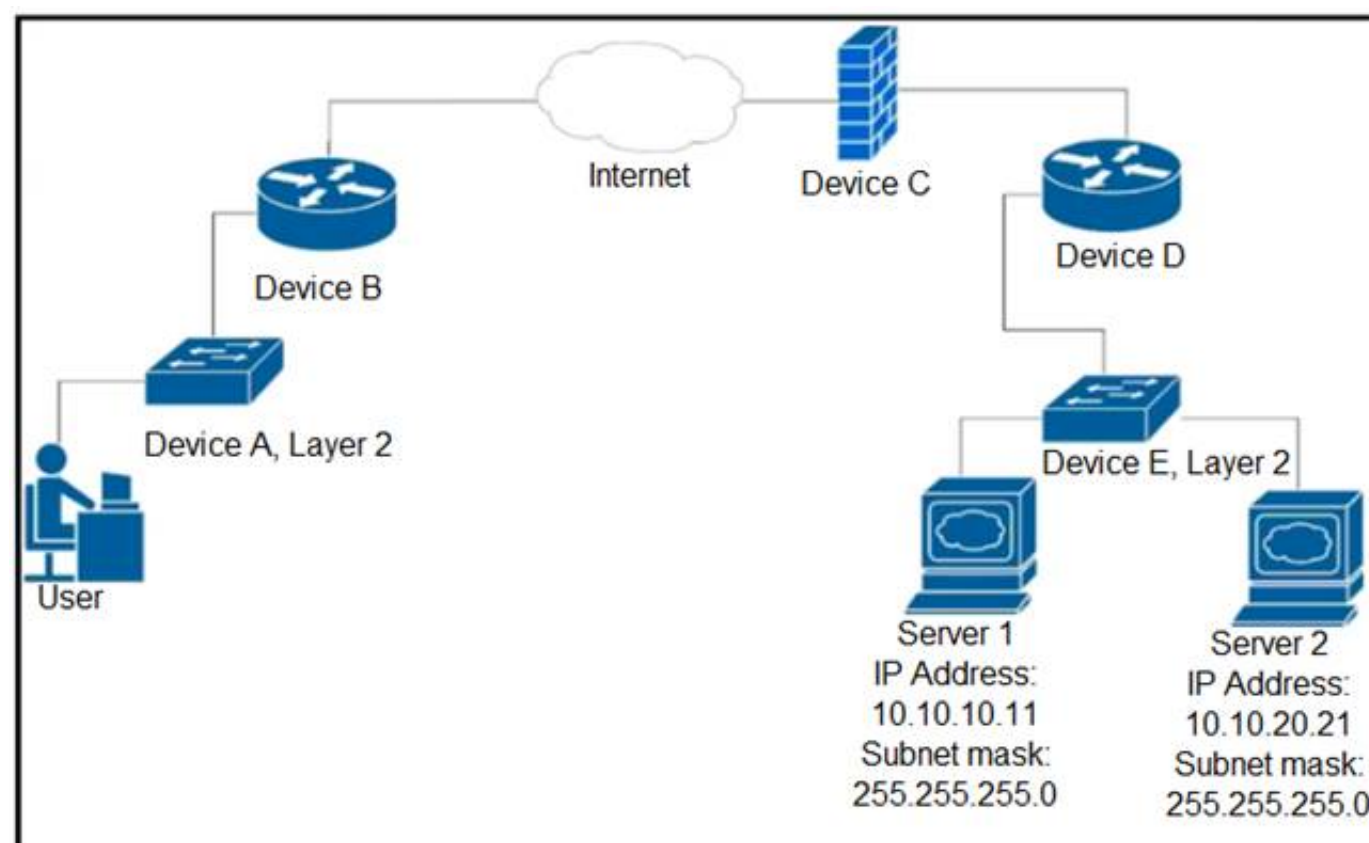
- A. enabling HSRP on the nxos\_rtr inventory host
- B. enabling HSRP on the rtr-1a inventory host
- C. executing HSRP configuration from the Ansible controller node
- D. executing HSRP configuration from the srv-1a inventory host

Answer: B

#### NEW QUESTION 427

- (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

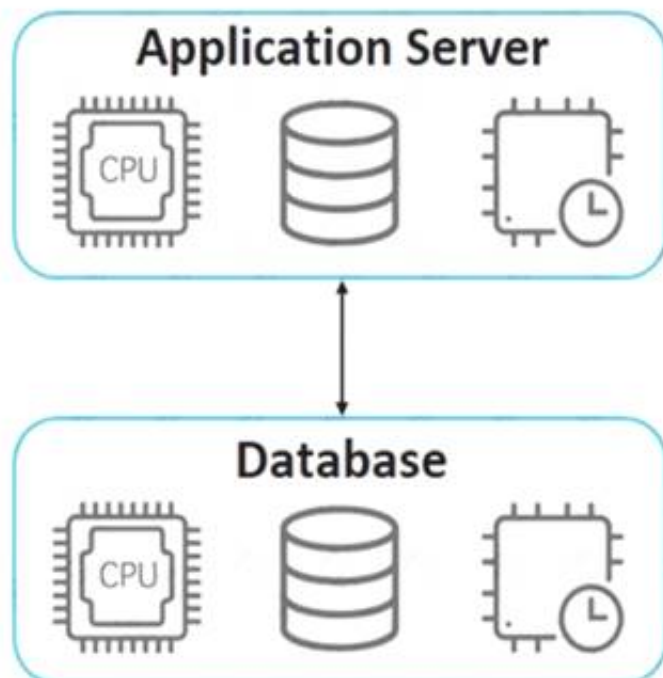
Answer: C

#### NEW QUESTION 428

- (Exam Topic 3)

Refer to the exhibit.

## Hypervisor



An application must be deployed on a server that has other applications installed. The server resources are to be allocated based on the deployment requirements. The OS for each application must be independent. Which type of deployment is used?

- A. hybrid
- B. virtual machines
- C. containers
- D. bare metal

**Answer:** B

### NEW QUESTION 431

- (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 434

- (Exam Topic 3)

A developer creates a new application, but the application must be tested before being released to a customer. When a mobile phone that uses 4G is used to access the application, the request fails. Why does the connection to the application fail?

- A. The application is hosted on premises and VPN connectivity is required
- B. The application must be added to the production server before testing.
- C. The application must be moved to the cloud before testing is possible.
- D. The application connectivity is limited to HTTPS protocol.

**Answer:** A

### NEW QUESTION 439

- (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 443

- (Exam Topic 3)

Which platform has an API that has the capability to obtain a list of vulnerable software on user devices?

- A. Cisco Advanced Malware Protection
- B. Cisco Umbrella
- C. Cisco Identity Services Engine
- D. Cisco Firepower

**Answer:** A

#### NEW QUESTION 446

- (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 450

- (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 VIRT
- C. pyATS
- D. Cisco Packet Tracer

**Answer:** B

#### NEW QUESTION 451

- (Exam Topic 3)

```
import requests
from requests.auth import HTTPBasicAuth

user= "user"
password= "PASSWORD"

token=requests.post('https://<DNAC ADRESS>/dna/system/api/v1/auth/token',
)
```

Refer to the exhibit. A developer must use a token to collect data from Cisco DNA Center API and prepares a Python script to send requests. Which line of code needs to be placed on the snippet where the code is missing to obtain a token from the Cisco DNA Center API?

- A. token=BasicAuth('user','password')
- B. auth=BasicAuth('user','password')
- C. auth=HTTPBasicAuth(user,password)
- D. token=HTTPBasicAuth(user,password)

Answer: C

#### NEW QUESTION 453

- (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 456

- (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 'polUni':

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

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.ModDirectory(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+=1
```

fvBD

fvTenant

ClassQuery

bdname

DnQuery

ClassName

commit

- 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.ModDirectory(ls)
aci.login()
c = cobra.mit.request.ConfigRequest()

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

qry2 =  ClassQuery ("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(  fvBD , ip=f'10.114.{i}.1/24')
    c.addMo(fvBD)
    aci.  commit (c)
    i+=1
```

fvBD

fvTenant

ClassQuery

bdname

DnQuery

ClassName

commit

#### NEW QUESTION 459

- (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 461

- (Exam Topic 2)

Which Cisco product provides malware and content filtering through DNS?

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

**Answer:** D

#### NEW QUESTION 465

- (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 469

- (Exam Topic 2)

What is a benefit of a model-driven approach for infrastructure automation?

- A. enforces the generation of all automation scripts through the modeling environment
- B. provides a small learning curve and helps system administrators with limited coding experience
- C. ensures that system administrators gain a good understanding of coding and expand their experience and capabilities
- D. enables a user to understand a declarative language to translate the model into an actionable script

**Answer:** A

#### NEW QUESTION 474

- (Exam Topic 2)

What is a benefit of using edge computing in an IoT implementation?

- A. low cost in network design
- B. low network design complexity
- C. high availability for network components
- D. high speed in data processing

**Answer:** D

#### NEW QUESTION 479

- (Exam Topic 2)

Drag and drop the code snippets from the bottom to the blanks in the code to test the API response through the Python unittest library. Not all options are used.

```
import unittest
import json
from apidogs import app

class TestsAPIDogs(unittest.TestCase):

    def setUp(self):
        self.app = app.test_client()

    # Check status response of API
    def test_status(self):
        resp =self.app.get('/dogs/all')
        status_code = response.
        self.assertEqual(status_code, )

    # Check for content type is in application/json
    def test_content_type(self):
        resp =self.app.get('/dogs/all')
        self.assertEqual(resp. , 'application/json')

    def test_item_not_exist(self):
        resp =self.app.get('/dogs?id= ')
        self.assertEqual(response.status_code,404)
```

none

status\_code

403

content

200

status

content\_type

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:  
Graphical user interface, text Description automatically generated

NEW QUESTION 482  
- (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 486  
- (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.
```

router\_id

device\_id

DNACenterAPI

DNAC

port\_list

routers

devices



#### NEW QUESTION 489

- (Exam Topic 3)

Which Cisco platform is used to manage data center infrastructure through third-party tools and system integrations?

- A. Cisco DNA Center
- B. Cisco UCS Manager
- C. Cisco Intersight
- D. Cisco UCS Director

**Answer:** D

#### NEW QUESTION 492

- (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 493

- (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 494

- (Exam Topic 3)

A developer completed the creation of a script using Git. Before delivering it to the customer, the developer wants to be sure about all untracked files, without losing any information. Which command gathers this information?

- A. git clean -n
- B. git rm -f
- C. git clean -r
- D. git rm \*

**Answer:** A

#### NEW QUESTION 498

- (Exam Topic 3)

A customer's cloud services must:

Migrate services to another data center on demand. Save the operational state of the machine on demand. Support Windows and Linux GUIs.

Maximize hardware utilization.

Which type of deployment meets these requirements?

- A. bare metal
- B. container
- C. virtual machine
- D. Kubernetes

**Answer:** C

#### NEW QUESTION 499

- (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 502

- (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 506

- (Exam Topic 3)

A group of software developers wants to improve its collaboration with the operations team. The group wants to deliver release-ready code that merges code changes back to the main branch and runs the automated testing as often as possible. Which DevOps concept does this scenario represent?

- A. continuous delivery
- B. version control
- C. continuous integration
- D. continuous deployment

**Answer: C**

#### NEW QUESTION 509

- (Exam Topic 3)

How does edge computing analyze sensitive data in the context of privacy control?

- A. locally instead of sending the data to the cloud for analysis
- B. locally or on the cloud depending on the configuration
- C. all at once by sending the data to the cloud
- D. locally on each node, and then sends the data to the cloud

**Answer: A**

#### NEW QUESTION 514

- (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 519

- (Exam Topic 3)

What is a benefit of a CI/CD pipeline for infrastructure?

- A. removes manual errors
- B. enables manual steps
- C. removes the need for operations
- D. provides variety for deployments

**Answer:** A

#### NEW QUESTION 524

- (Exam Topic 3)

How are operations on REST APIs performed as compared to RPC APIs?

- A. In a REST API, operations are performed on an object (node) that is identified by a URL, but RPC APIs are operation-oriented.
- B. In a REST API, operations are performed on an external resource that is defined on the API, but the RCP APIs are resource-oriented.
- C. In a REST API, operations are performed on a platform that is identified by the URL, but RPC APIs are platform-oriented.
- D. In a REST API, operations are performed on an internal resource that is defined on the API, but RPC APIs are resource-oriented.

**Answer:** D

#### Explanation:

In a REST API, operations are performed on resources, which are accessed and manipulated using HTTP verbs such as GET, POST, PUT, and DELETE. These resources are identified by a URL and are defined within the API. For example, an API may define a resource called "customers", which can be accessed using the URL "http://api.example.com/customers". To retrieve a list of customers, the client could make a GET request to this URL. To create a new customer, the client could make a POST request to the same URL with the necessary data in the request body. In contrast, in an RPC API, operations are performed by making function calls. The client makes a request to the server, specifying the function to be called and any necessary parameters. The server then executes the function and returns the result to the client. RPC APIs are operation-oriented, meaning that the focus is on the function being called rather than the resource being accessed.

#### NEW QUESTION 525

- (Exam Topic 3)

Which traffic is handled on the control plane?

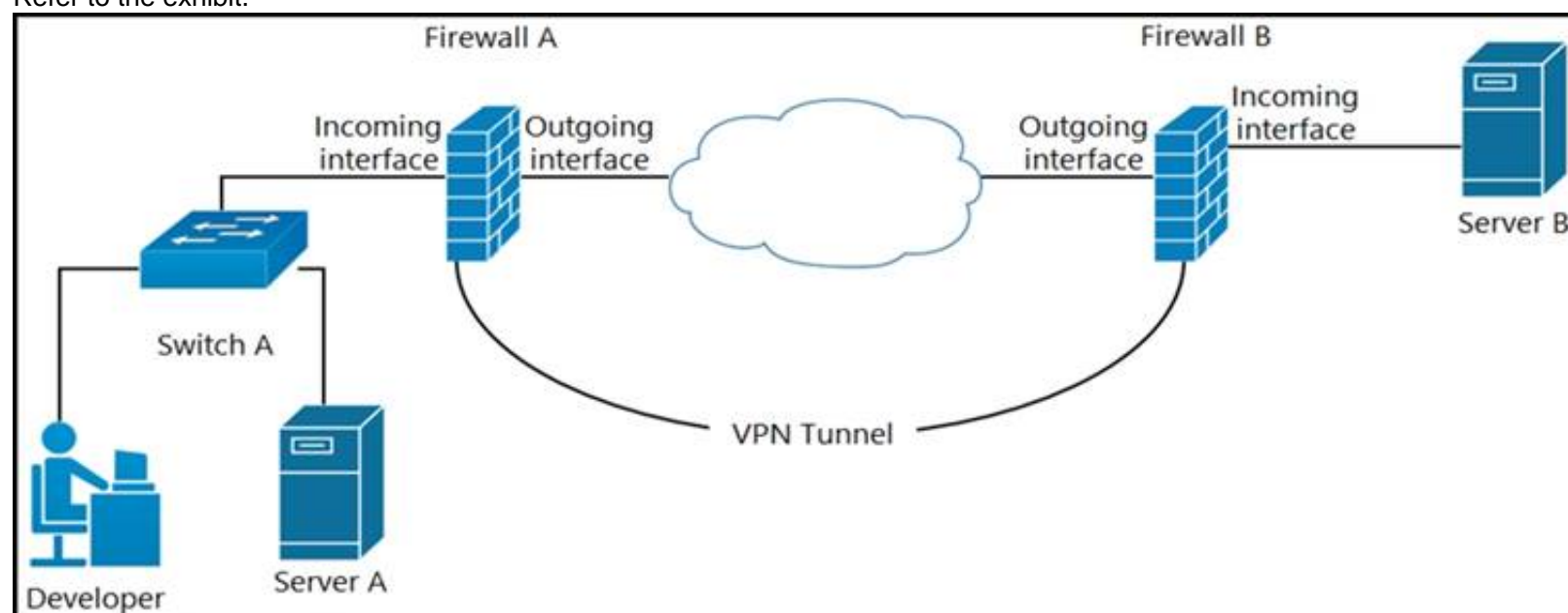
- A. BGP
- B. SMB
- C. NTP
- D. NETCONF

**Answer:** A

#### NEW QUESTION 530

- (Exam Topic 3)

Refer to the exhibit.



A developer can access the TLS REST API on server A, but cannot access the API on server B. The developer can ping server B. When the developer performs a packet capture on the TLS REST API port on server B, the capture shows that the packet arrived and the server responded. What causes the issue?

- A. Port 80 is blocked on the outgoing interface of firewall B.
- B. Port 443 is blocked on the outgoing interface of firewall A.
- C. Port 443 is blocked on the incoming interface of firewall B.
- D. Port 80 is blocked on the incoming interface of firewall A.

**Answer:** C

#### NEW QUESTION 531

- (Exam Topic 3)

Which protocol runs over TCP port 830?

- A. NETCONF



- B. Telnet
- C. RESTCONF
- D. HTTP

**Answer:** A

#### 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 536

- (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 538

- (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 541

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