

## 200-901 Dumps

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

<https://www.certleader.com/200-901-dumps.html>



**NEW QUESTION 1**

- (Exam Topic 2)

Refer to the exhibit.

```

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

```

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

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

**Answer: B**

**NEW QUESTION 2**

- (Exam Topic 2)

Into which type of Python data structure should common data formats be parsed?

- A. sequence
- B. set
- C. dictionary
- D. list

**Answer: C**

**NEW QUESTION 3**

- (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 4**

- (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 5**

- (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 6**

- (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	Controller level <div style="border: 1px solid black; height: 20px; width: 100%; margin-bottom: 5px;"></div> <div style="border: 1px solid black; height: 20px; width: 100%;"></div>
user and programmability interaction through the use of Northbound APIs	
iterate over a list of devices	Device level <div style="border: 1px solid black; height: 20px; width: 100%; margin-bottom: 5px;"></div> <div style="border: 1px solid black; height: 20px; width: 100%;"></div>
configure features with YANG models	

- A. Mastered
- B. Not Mastered

**Answer:** A

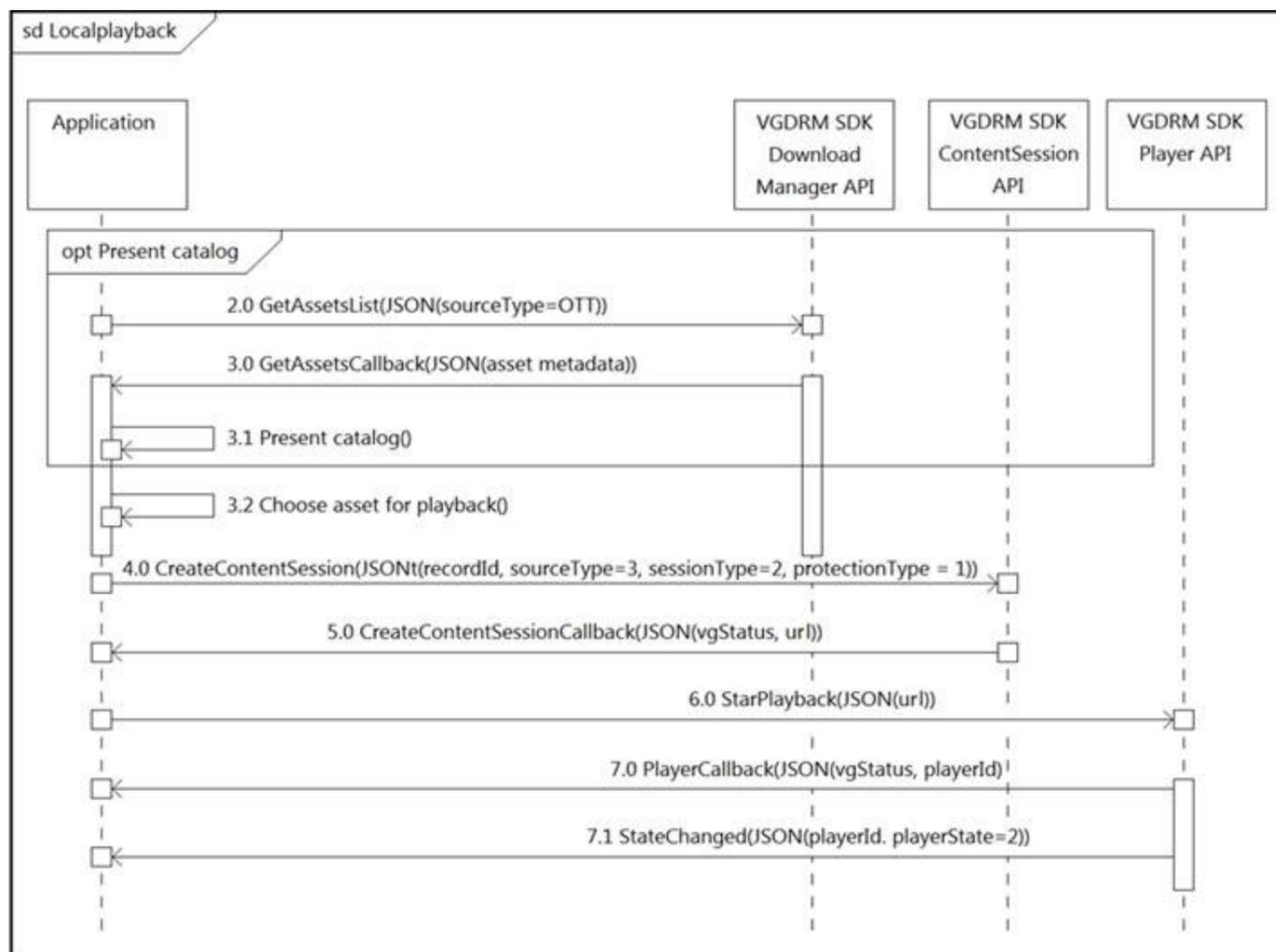
**Explanation:**

Graphical user interface, application Description automatically generated with medium confidence

**NEW QUESTION 7**

- (Exam Topic 2)

Refer to the exhibit.



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

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

**Answer: D**

**NEW QUESTION 8**

- (Exam Topic 2)

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

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

**Answer: D**

**NEW QUESTION 9**

- (Exam Topic 2)

Which protocol runs over TCP port 23?

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

**Answer: D**

**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'])
```

- |   |   |
|---|---|
| <input type="text" value="client"/>                 | <input type="text" value="application/json"/> |
| <input type="text" value="application/xml"/>        | <input type="text" value="clients"/>          |
| <input type="text" value="X-Cisco-Meraki-API-Key"/> | <input type="text" value="networks"/>         |
| <input type="text" value="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'])
```

- |  |                      |
|--|----------------------|
| <input type="text" value="client"/>                | <input type="text"/> |
| <input type="text" value="application/xml"/>       | <input type="text"/> |
| <input type="text" value="Authorization: Bearer"/> |                      |

**NEW QUESTION 10**

- (Exam Topic 2)

A developer has created a new image to use in a Docker build and has added a tag for the image by using the command:  
\$ docker tag 84fe411926287 local/app:0.4

Which command must be executed next to build the Docker image using the tag?

- A. \$ docker build -p local/app:0.4
- B. \$ docker run -t local/app:0.4
- C. \$ docker run -p local/app:0.4
- D. \$ docker build -t local/app:0.4

Answer: D

**NEW QUESTION 11**

- (Exam Topic 2)

Refer to the exhibit.

```

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

```

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

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

**Answer:** A

**NEW QUESTION 12**

- (Exam Topic 2)

Access to the management interface of devices must be restricted by using SSH and HTTPS. Which two ports must be included in the ACLs for the protocols to work? (Choose two.)

- A. 22
- B. 23
- C. 80
- D. 443
- E. 880

**Answer:** AD

**NEW QUESTION 14**

- (Exam Topic 2)

Refer to the exhibit.

**Generating Client ID and API Key:**

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

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

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

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

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

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

A)

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

B)

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

C)

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

D)

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

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

**Answer: D**

**NEW QUESTION 19**

- (Exam Topic 2)

What are two functions of a routing table on a network device? (Choose two.)

- A. It lists entries more than two hops away.
- B. It lists the routes to a particular destination.
- C. It lists the routes to drop traffic.
- D. It lists hosts that are one hop away.
- E. It lists the static and dynamic entries.

**Answer: BE**

**NEW QUESTION 22**

- (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 23**

- (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 25**

- (Exam Topic 2)

While developing a real-Time VoIP application on a Cisco Webex platform, users report that their voice gets chopped or parts of the conversation drop out. Which network constraint is impacting the application?

- A. latency
- B. jitter
- C. capacity
- D. delay

**Answer:** B

**NEW QUESTION 29**

- (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 31**

- (Exam Topic 2)

How do XML and JSON compare regarding functionality?

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

Answer: A

**NEW QUESTION 32**

- (Exam Topic 2)

```
GET getNetworkHttpServers
https://api.meraki.com/api/v0/networks/:networkId/httpServers
List the HTTP servers for a network

AUTHORIZATION
API Key

This request is using an authorization helper from collection Meraki Dashboard
API
HEADERS
Accept
*/*
```

Refer to the exhibit. A developer is creating a Python script to obtain a list of HTTP servers on a network named office\_east by using the Cisco Meraki API. The request has these requirements:

- Must time out if the response is not received within 2 seconds.
- Must utilize client certificates and SSL certificate verification.
- Must utilize basic authentication that uses a username of admin and a password of cisco.
- Must save the response to an object named response.

Drag and drop the code snippets from the bottom onto the blanks in the code to meet the requirements. Not all options are used.

```
import requests
from requests.auth import HTTPBasicAuth
network = 'office east'
url = 'https://api.meraki.com/api/v0/networks/{}/httpServers'.format (network)
[ ] = requests.get(url=url, headers={ 'Accept': '*/*' },
verify='/etc/pki/tls/certs/ca.pem',
timeout= [ ] ,
[ ] = ('/etc/pki/tls/certs/client.pem',
'/etc/pki/tls/certs/client.key'),
auth= [ ] ('admin', 'cisco'))
response.status_code
```

token	response	2
HTTPTokenAuth	HTTPBasicAuth	cert

- A. Mastered
- B. Not Mastered

Answer: A

**Explanation:**

Text Description automatically generated

Reference:

<https://community.cisco.com/t5/networking-blogs/authenticating-rest-api-calls-to-dnac-getting-started/ba-p/3658>

**NEW QUESTION 34**

- (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 39**

- (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 44**

- (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 47**

- (Exam Topic 2)

A developer creates a web application that receives a username and password and uses them to sync the credentials to other services through HTTPS. API keys to services are part of the configuration files of the application, but the credentials to the database that stores the synchronization logs are obtained through an external vault service. What is the security issue in this scenario?

- A. Communication between the application and the services is not encrypted.
- B. The database credentials should be stored in the configuration files so that they are secured on the same server.
- C. The API keys are stored in the configuration files but should be stored in the vault service.
- D. The synchronization logs should be encrypted and not stored in a relational database.

**Answer:** A

**NEW QUESTION 50**

- (Exam Topic 2)

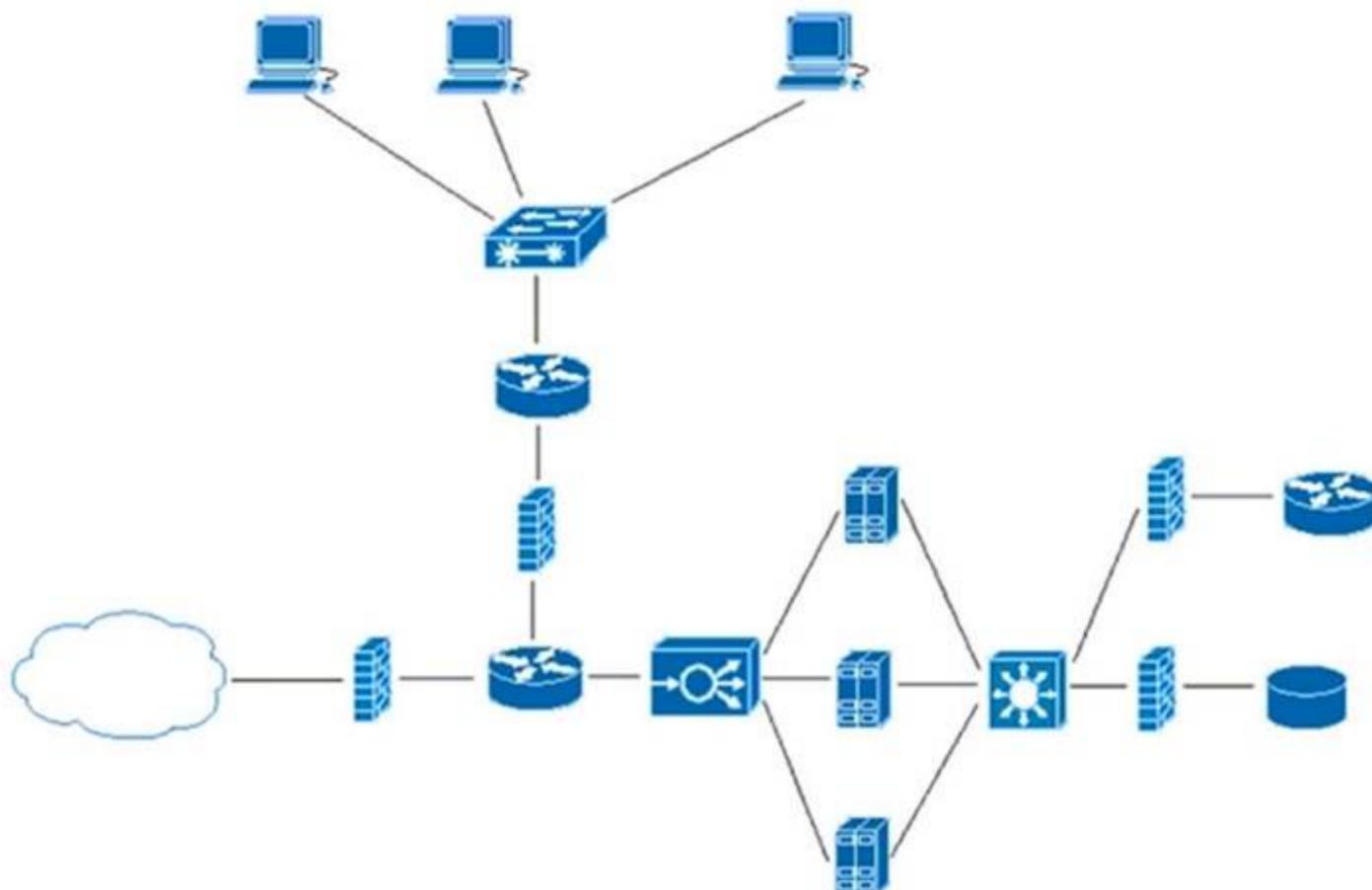
A developer is trying to retrieve data over a REST API. The API server responds with an HTTP client error response code. After investigating the response the developer realizes the response has a Retry-After header. What is the root cause of this error?

- A. The REST service is unreachable at the time of the REST request
- B. Too many requests were sent to the REST service in a given amount of time.
- C. An appliance limited the rate of requests to the transport layer.
- D. An appliance limited the rate of requests to the application layer

**Answer:** B

**NEW QUESTION 52**

- (Exam Topic 2)



Refer to the exhibit. What does the load balancer enable in the network topology?

- A. hosted application to access Internet services
- B. external requests to be routed to the application servers
- C. workstations to access the Internet
- D. application to access the database server

**Answer: C**

**NEW QUESTION 54**

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

```

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

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

**Answer: C**

**NEW QUESTION 58**

- (Exam Topic 2)

A developer is creating a script to interact with a REST API service which requires basic authentication. The credentials are "devnet:391665405" and the Base64 encoding of the credentials is "GV2bmV0dXNlcjpwDaXNj=". Which payload and header combination must be used for authentication?

- A.
- ```
payload = {
    'Authorization' : 'Basic GV2bmV0dXNlcjpwDaXNj=',
    'Content-Type' : 'application/json'
}
headers= {}
```
- B.
- ```
payload = {}
headers= {
    'Authorization' : 'Basic GV2bmV0dXNlcjpwDaXNj=',
    'Content-Type' : 'application/json'
}
```
- C.
- ```
payload = {
    'Authorization' : 'Bearer GV2bmV0dXNlcjpwDaXNj=',
    'Content-Type' : 'application/json'
}
headers= {}
```
- D.
- ```
payload = {}
headers= {
    'Authorization' : 'Bearer GV2bmV0dXNlcjpwDaXNj=',
    'Content-Type' : 'application/json'
}
```

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

**Answer: B**

**Explanation:**

<https://developer.cisco.com/docs/epnm/#!/how-to-authenticate/authorization>

**NEW QUESTION 60**

- (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 61**

- (Exam Topic 2)

Which Cisco platform provides organization-wide automation, security, policy enforcement, any agility across wired and wireless networks?

- A. Cisco ACI
- B. Cisco DNA Center
- C. Cisco Umbrella
- D. Cisco SD-WAN

Answer: B

**NEW QUESTION 65**

- (Exam Topic 2)

Drag and drop the code from the bottom onto the box where the code is missing in the Bash script to complete the missing assignment.

```
#!/bin/bash  
  
[ ] = `date +%b-%d-%y`  
[ ] = /home/usr/path/backup-$BACKUPTIME.tar.gz  
[ ] = /home/usr/path/data_folder  
  
tar -cpzf $DESTINATION $SOURCEFOLDER
```

BACKUPTIME      SOURCEFOLDER      DESTINATION

- A. Mastered
- B. Not Mastered

Answer: A

**Explanation:**

```
#!/bin/bash  
  
BACKUPTIME = `date +%b-%d-%y`  
DESTINATION = /home/usr/path/backup-$BACKUPTIME.tar.gz  
SOURCEFOLDER = /home/usr/path/data_folder  
  
tar -cpzf $DESTINATION $SOURCEFOLDER
```

BACKUPTIME      SOURCEFOLDER      DESTINATION

**NEW QUESTION 69**

- (Exam Topic 2)

Refer to the exhibit.

```

user_manager.py
1 import psycopg2
2 import json, sys
3
4 # Load config file
5 config = None
6 with open('config.json') as config_file:
7     config = json.load(config_file)
8 if not config:
9     print("Error loading configuration file.")
10    sys.exit(1)
11
12 connection = psycopg2.connect(
13     database="users",
14     host=config["DB_USER"], user=config["DB_USER"], password=config["DB_PWD"]
15 )
16 connection.set_session()
17
18 def has_admin_role(username):
19     with connection.cursor() as cursor:
20         query = 'SELECT admin_role FROM users WHERE username = {0}'
21         cursor.execute(query.format(username))
22         result = cursor.fetchone()
23     return result
24
25 has_admin_role("ops.shared")

config.json
1 {
2     "DB_USER": "pguser",
3     "DB_PWD": "@123Qwer%4",
4     "DB_HOST": "devnetdb.example.com"
5 }

```

An engineer must check the admin rights of users on a database regularly and prepares the Python script to automate the process. The script connects to the database and runs a query. What is a security issue about the secrets in the code that relates to secret protection?

- A. They must be stored in configuration files if there is a possibility of leakage.
- B. They must be Base64-encoded if stored in the user database.
- C. They must be encrypted if stored in the user database.
- D. They must be stored in configuration files if no authentication will be used.

**Answer: D**

### NEW QUESTION 73

- (Exam Topic 2)

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

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

**Answer: C**

### NEW QUESTION 78

- (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 83

- (Exam Topic 2)

Which platform is used to programmatically create a space and invite users for collaboration?

- A. Cisco Intersight
- B. Cisco Finesse
- C. Cisco Webex
- D. Cisco UCM

Answer: C

**NEW QUESTION 87**

- (Exam Topic 2)

Where is an IP packet routed if the packet does not match any routes in the routing table?

- A. firewall
- B. load balancer
- C. central switch
- D. default gateway

Answer: D

**NEW QUESTION 92**

- (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 94**

- (Exam Topic 2)

What is a benefit of model-driven programmability?

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

Answer: D

**NEW QUESTION 99**

- (Exam Topic 2)

Which HTTP response status code means "Forbidden"?

- A. 500
- B. 401
- C. 403
- D. 502

Answer: C

**Explanation:**

Reference: <https://developer.mozilla.org/en-US/docs/Web/HTTP/Status/403>

**NEW QUESTION 100**

- (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 101**

- (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 102**

- (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 107**

- (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 112**

- (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 -zxf /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 116**

- (Exam Topic 2)

What is used in JSON to represent a Python Tuple?

- A. Object
- B. Array
- C. Dict
- D. Collection

**Answer:** B

**NEW QUESTION 118**

- (Exam Topic 2)

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

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

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

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

**Answer:** BD

**NEW QUESTION 121**

- (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 123**

- (Exam Topic 2)

Refer to the exhibit.

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

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

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

**Answer: D**

**NEW QUESTION 125**

- (Exam Topic 2)

Refer to the exhibit.

```
module ietf-ip {
  namespace "urn:ietf:params:xml:ns:yang:ietf-ip";
  prefix ip;
  import ietf-interfaces {
    prefix if;
  }
  augment "/if:interfaces/if:interface" {
    container ipv4 {
      leaf enabled {
        type boolean;
        default true;
      }
      list address {
        key "ip";
        leaf ip {
          type inet:ipv4-address-no-zone;
        }
        choice subnet {
          mandatory true;
          leaf prefix-length {
            type uint8 {
              range "0..32";
            }
          }
          leaf netmask {
            type yang:dotted-quad;
          }
        }
      }
    }
  }
}

module ietf-interfaces {
  namespace "urn:ietf:params:xml:ns:yang:ietf-interfaces";
  prefix if;
  typedef interface-ref {
    type leafref {
      path "/if:interfaces/if:interface/if:name";
    }
  }
  container interfaces {
    list interface {
      key "name";
      leaf name {
        type string;
      }
      leaf description {
        type string;
      }
      leaf type {
        type identityref {
          base interface-type;
        }
        mandatory true;
      }
      leaf enabled {
        type boolean;
        default "true";
      }
    }
  }
}
```

Which JSON snippet configures a new interface according to YANG model?

- A)
- ```

"ietf-interfaces:interface": {
  "name": "Loopback100",
  "enabled": true,
  "ietf-ip:ipv4": {
    "address": [
      {
        "ip": "10.255.254.1",
        "netmask": "255.255.255.0"
      }
    ]
  }
}

```
- B)

```

“ietf-interfaces”: {
  interface: {
    “name”: “Loopback100”,
    “enabled”: true,
    “ietf-ip”: {
      ipv4: {
        “address”: [
          {
            “ip”: “10.255.254.1”,
            “netmask”: “255.255.255.0”
          }
        ]
      }
    }
  }
}

```

C)

```

“ interface” {
  “name”: “Loopback100”,
  “enabled”: true,
  “ipv4”: {
    “address”: [
      {
        “ip”: “10.255.254.1”,
        “netmask”: “255.255.255.0”
      }
    ]
  }
}

```

D)

```

“ietf-interfaces:interface”: {
  “name”: “Loopback100”,
  “enabled”: true,
  “ietf-ip:ipv4:address”: [
    {
      “ip”: “10.255.254.1”,
      “netmask”: “255.255.255.0”
    }
  ]
}

```

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

**Answer: B**

**NEW QUESTION 126**

- (Exam Topic 2)

```

1  import requests
2
3  headers = {"X-Cisco-Meraki-API-Key": "KEY1234"}
4  BASE_URL = "https://api-mp.meraki.com/api/v1"
5  FIRST_URL = "/organizations"
6  SECOND_URL = "/networks"
7  THIRD_URL = "clients"
8
9  def first_loop(info):
10     for item in info:
11         if item["name"] == "ACME":
12             URL = BASE_URL + FIRST_URL + "/" + item["id"] + "/" + SECOND_URL
13             response = requests.request("GET", URL, headers=headers)
14             return second_loop(response.json())
15
16  def second_loop(info):
17     for item in info:
18         if item["name"] == "BLDG21":
19             URL = BASE_URL + SECOND_URL + "/" + item["id"] + "/" + THIRD_URL
20             response = requests.request("GET", URL, headers=headers)
21             return third_loop(response.json())
22
23  def third_loop(info):
24     for item in info:
25         return item
26
27  response = requests.request("GET", BASE_URL + FIRST_URL, headers=headers)
28  info = first_loop(response.json())
29  for item in info:
30     print (item["id"])

```

Refer to the exhibit. A network engineer must collect information from the network. The engineer prepares a script to automate workflow by using Cisco Meraki API. The script must run over nested loops to collect organization and network information and uses the collected data for final collection. Which process is being automated by using the Python script?

- A. Gather the IDs of the ACME organization, the BLDG21 network, and the dents on the network
- B. Provide the BLDG21 network information if it is part of the ACME organization
- C. Collect the IDs of the clients on the BLDG21 network
- D. List the IDs from the ACME organization

**Answer:** A

**NEW QUESTION 129**

- (Exam Topic 2)

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

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

**Answer:** D

**NEW QUESTION 132**

- (Exam Topic 2)

What is a functionality of the Waterfall method as compared to the Agile method for software development?

- A. Waterfall increases agility to implement faster while Agile promotes reliability.
- B. A phase begins after the previous phase has ended in Waterfall while Agile phases run in parallel.
- C. Customers get feedback during the process in Waterfall while they can see the result at the end in Agile.
- D. Requirements can be updated in Waterfall while in Agile it should be gathered in the beginning.

**Answer:** B

**NEW QUESTION 133**

- (Exam Topic 2)

What does a load balancer distribute in a network environment?

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

**Answer:** B

**NEW QUESTION 134**

- (Exam Topic 2)

A developer created a new secure API and is testing the functionality locally. The API was added to a container for further testing, and other team members and applications need to connect to the API. Which command exposes the API in the container as port 8443 and allows connections external to the host?

- A. `docker run -p 127.0.0.1:80:8443/tcp myapiservice`
- B. `docker run -p 0.0.0.0:443:8443/tcp myapiservice`
- C. `docker run -p 0.0.0.0:8443:443/tcp myapiservice`
- D. `docker run -p 127.0.0.1:443:8443/tcp myapiservice`

**Answer:** C

**NEW QUESTION 137**

- (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 142**

- (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 146**

- (Exam Topic 1)

Refer to the exhibit.

**List Messages**

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

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

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

**GET** /v1/messages

**Query Parameters**

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

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

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

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

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

Try it
Example

**GET** /v1/messages{?roomId,mentionedPeople,before,beforeMessage}

**Header**

Authorization  Use personal access token

Bearer .....

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

**Query Parameters**

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

**mentionedPeople** e.g. Y2lzY29zcGFyazovL3VzL1BFT1BMR56

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

**beforeMessage** e.g. Y2lzY29zcGFyazovL3VzL1FU1NBROL

**max** e.g. 100

Run

```
bash-3.2$ curl -H "Content-Type: application/json" -H "Authorization: Fj2zzzykEa091ic9GK2j8LtE1HklHklH6oRHPQdw1Pat60i7ndtHHnWzL2b5pgMg14Kk_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 150**

- (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 152**

- (Exam Topic 1)  
Refer to the exhibit.

For CLI commands that support XML, the `clid()` method returns JSON output. An exception is thrown when XML is not used. Executes CLI commands. Takes CLI command string and returns show command output in a JSON form.

“  
Note: The “clid” API can be useful when searching the output of show commands using JSON tools as shown in the example.

### PYTHON

```
Example:
>>> import json
>>> from cli import *
>>> jversion = json.loads(clid("show
version"))
>>> jversion['bios_ver_str']
'08.06'
```

#### Arguments:

- `cmd`: Single CLI command or a batch of CLI commands. Delimiter for multiple CLI commands is a space followed by a semicolon. Configuration commands must be in a fully qualified form.

#### Returns:

- string: JSON-formatted output of show commands.

```
>>> from cli import *
>>> import json

>>>
>>> cli('configure terminal ; interface loopback 5 ; no shut')
''
>>> intflist=json.loads(clid('show interface brief'))
>>> i=0
>>> while i < len (intflist['TABLE_interface']['ROW_interface']):
...     intf=intflist['TABLE_interface']['ROW_interface'][i]
...     i=i+1
...     if intf['state'] == 'up':
...         print intf['interface']
```

The python interpreter and the Cisco python SDK are available by default in the Cisco NX-OS software. The SDK documentation shows how the `clid()` API can be used when working with working with JSON and XML. What are two effect of running the script? (Choose two.)

- configure interlace loopback 5
- issue shutdown on interface loopback 5
- show only the interfaces In the up status
- show only the interfaces in admin shut status
- show details for the TABLE interface

**Answer:** AC

#### Explanation:

Reference:

[https://www.cisco.com/c/en/us/td/docs/switches/datacenter/nexus9000/sw/7-x/programmability/guide/b\\_Cisco\\_](https://www.cisco.com/c/en/us/td/docs/switches/datacenter/nexus9000/sw/7-x/programmability/guide/b_Cisco_)

### NEW QUESTION 157

- (Exam Topic 1)

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

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

**Answer:** BE

**NEW QUESTION 159**

- (Exam Topic 1)

Refer to the exhibit.

```
class ucsmSdk.ucshandle.UcsHandle(ip, username, password, port=None, secure=None, proxy=None)
```

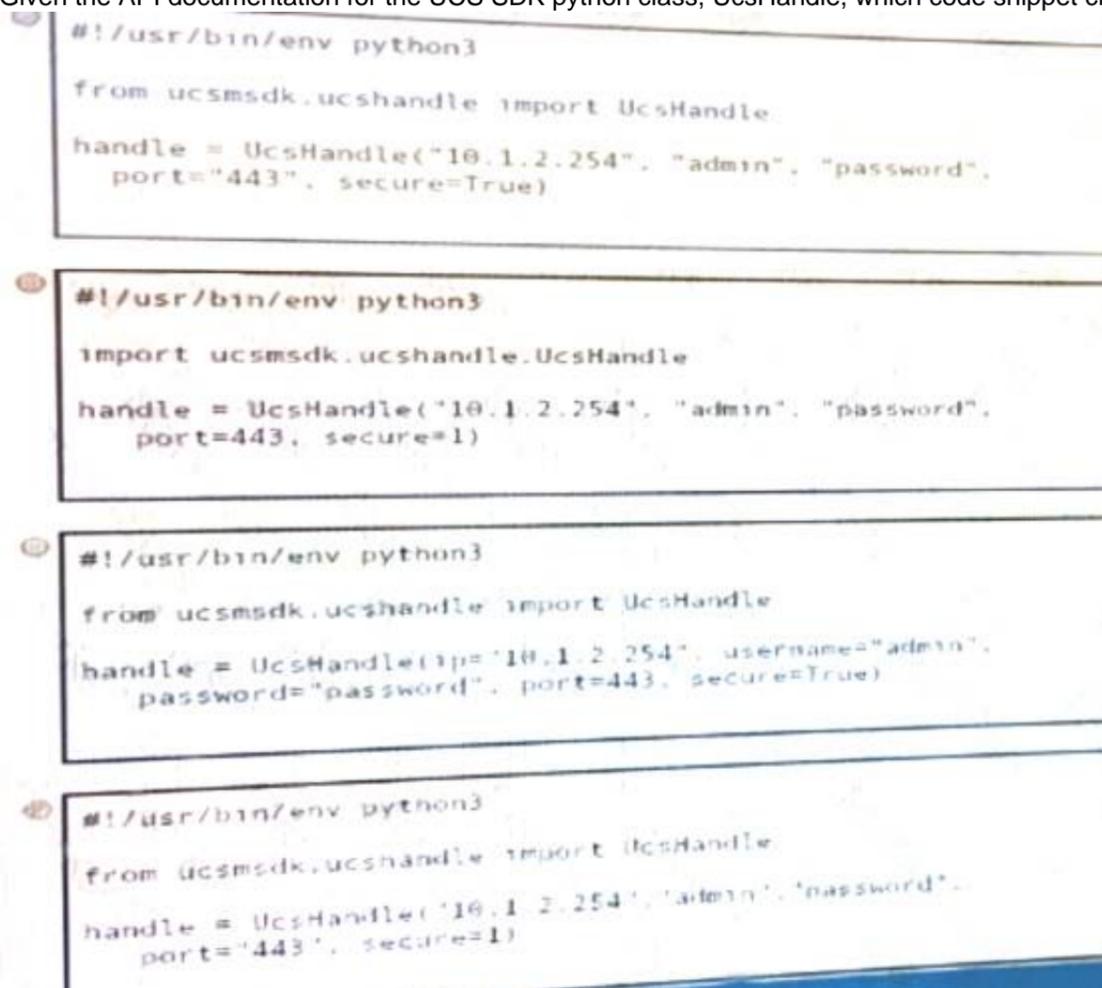
**Bases:** ucsmSdk.ucssession.UcsSession [source]

UcsHandle class is the user interface point for any Ucs related communication.

**Parameters:**

- **ip** (*str*) – The IP or Hostname of the UCS Server
- **username** (*str*) – The username as configured on the UCS Server
- **password** (*str*) – The password as configured on the UCS Server
- **port** (*int or None*) – The port number to be used during connection
- **secure** (*bool or None*) – True for secure connection, otherwise False
- **proxy** (*str*) – The proxy object to be used to connect

Given the API documentation for the UCS SDK python class, UcsHandle, which code snippet creates a handle instance?



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

**Answer: C**

**NEW QUESTION 161**

- (Exam Topic 1)

Which HTTP status Code means that the server cannot or will not process the request because of perceived client error?

- A. 100
- B. 203
- C. 303
- D. 400

**Answer: D**

**NEW QUESTION 163**

- (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 168**

- (Exam Topic 1)

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

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

**Answer: D**

**NEW QUESTION 170**

- (Exam Topic 1)

What is used in Layer 2 switches to direct packet transmission to the intended recipient?

- A. spanning tree
- B. IPv4 address
- C. IPv6 address
- D. MAC address

**Answer: D**

**NEW QUESTION 175**

- (Exam Topic 1)

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

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

**Answer: CE**

**NEW QUESTION 177**

- (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 179**

- (Exam Topic 1)

Refer to the exhibit.

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

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

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

**Answer: B**

**NEW QUESTION 180**

- (Exam Topic 1)

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

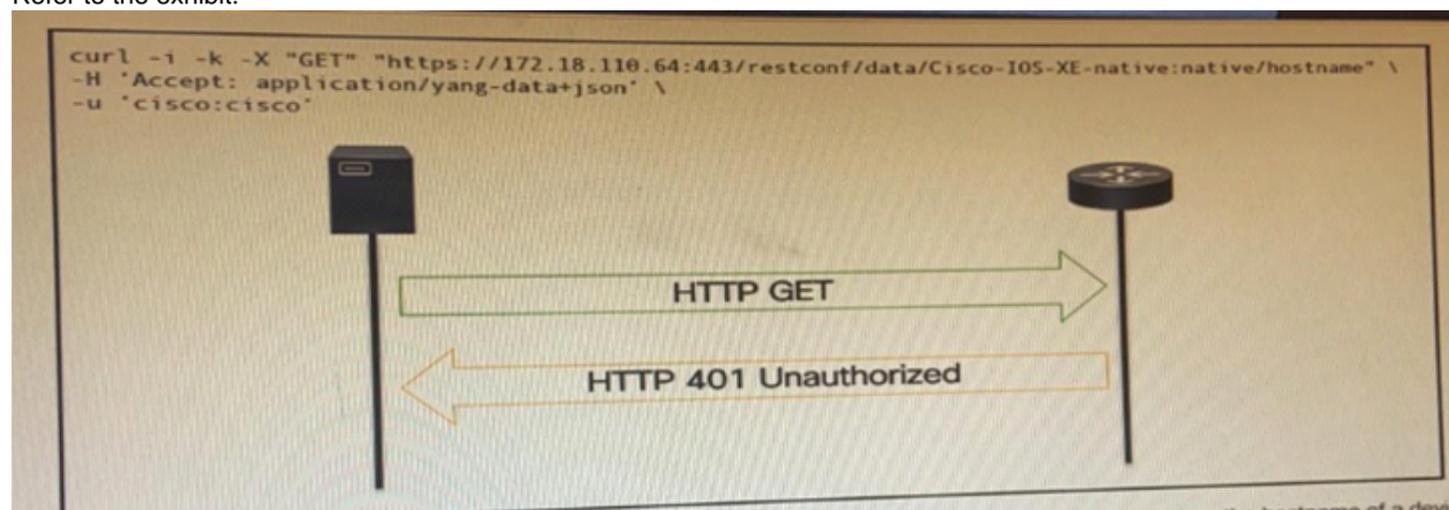
- A. Internet access to the servers will be denied on the router.
- B. A router will limit the traffic types between the clients and servers.
- C. Subnets will split domains to limit failures.
- D. A router will bridge the traffic between clients and servers.
- E. Subnets provide more IP address space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

**Answer: AC**

**NEW QUESTION 184**

- (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 187**

- (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 188**

- (Exam Topic 1)

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

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

**Answer: A**

**NEW QUESTION 190**

- (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 192**

- (Exam Topic 1)

Refer to the exhibit.

**List the clients that have used this network in the timespan**

**HTTP REQUEST**

`GET /networks/ {networkId}/clients`

**PARAMETERS**

**t0**  
The beginning of the timespan for the data. The maximum lookback period is 31 days from today.

---

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

---

**perPage**  
The number of entries per page returned. Acceptable range is 3 - 1000. Default is 10.

---

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

---

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

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

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

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

- A. Mastered
- B. Not Mastered

**Answer:** A

**Explanation:**

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

**NEW QUESTION 196**

- (Exam Topic 1)

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

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

**Answer:** C

**NEW QUESTION 197**

- (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 200**

- (Exam Topic 1)

A developer is writing an application that a REST API and the application requires a valid from the API which element of the response is used in the conditional check?

- A. URL
- B. Status code
- C. Link
- D. Body
- E. Headers

**Answer: B**

**NEW QUESTION 203**

- (Exam Topic 1)

Refer to the exhibit.

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

What is the function of the python script?

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

**Answer: E**

**NEW QUESTION 206**

- (Exam Topic 1)

Refer to 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 211**

- (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 215**

- (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 220**

- (Exam Topic 1)

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

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

- A. Mastered
- B. Not Mastered

**Answer:** A

**Explanation:**

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

**NEW QUESTION 224**

- (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 227**

- (Exam Topic 1)

Which device is used to transport traffic from one broadcast domain to another broadcast domain?

- A. load balancer
- B. layer 2 switch
- C. router
- D. proxy server

**Answer:** C

**NEW QUESTION 231**

- (Exam Topic 1)

Which two statements 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 232**

- (Exam Topic 1)

In DNS, which record specifies an alias that refers to another name that ultimately resolves to an IP address?

- A. AAA
- B. SOA
- C. NS
- D. CNAME

**Answer:** D

**Explanation:**

Reference: <https://ns1.com/resources/dns-types-records-servers-and-queries>

**NEW QUESTION 233**

- (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 236**

- (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 API key in the HTTP header for authentication.
- B. USC Director API interactions can be XML- or JSON-encoded and require an API 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 encode 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 239**

- (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 244**

- (Exam Topic 1)

Which status code is used by a REST API to indicate that the submitted payload is incorrect?

A. A.-400B.403C.405D.429

**Answer:** A

**Explanation:**

Reference:

<https://community.cisco.com/t5/application-centric/apic-rest-api-produces-inconsistent-response/td-p/2758230>

**NEW QUESTION 248**

- (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 253**

- (Exam Topic 1)

A function `my_func()` returns True when it executes normally. Which python snippet tests `my_func()`?

```
def test_func(self):
    self.assertTrue(my_func())
```

```
def test_func(self):
    self.assertRaises(my_func())
```

```
def test_func(self):
    self.assertEqual(my_func(), '{true}')
```

```
def test_func(self):
    self.assertFalse(my_func())
```

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

**Answer:** B

**NEW QUESTION 257**

- (Exam Topic 1)

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

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

**Answer:** B

**Explanation:**

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

**NEW QUESTION 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 263**

- (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 | 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 271**

- (Exam Topic 1)

Which statement describes the benefit of using functions in programming?

- A. Functions allow problems to be split into simpler, smaller groups, and reduce code repetition, which makes the code easier to read.
- B. Functions ensure that a developer understands the inner logic contained before using them as part of a script or application.
- C. Functions create the implementation of secret and encrypted algorithms.
- D. Functions store mutable values within a script or application.

**Answer:** A

**NEW QUESTION 276**

- (Exam Topic 1)

What is the outcome of executing this command?

```
git clone ssh://john@exmaple.com/path/to/my-project_git
```

- A. Creates a local copy of a repository called "my project"
- B. Creates a copy of a branch called "my project"
- C. Initiates a new Git repository called "my project"
- D. Creates a new branch called "my project"

**Answer:** A

**Explanation:**

Reference: <https://www.atlassian.com/git/tutorials/setting-up-a-repository/git-clone>

**NEW QUESTION 277**

- (Exam Topic 1)

Which Cisco DevNet resource allows access to products in a development lab to explore, learn, and build application that use Cisco APLs?

- A. DevNet communities
- B. DevNet code Exchange
- C. DevNet Automation Exchange
- D. DevNet sandbox

**Answer:** D

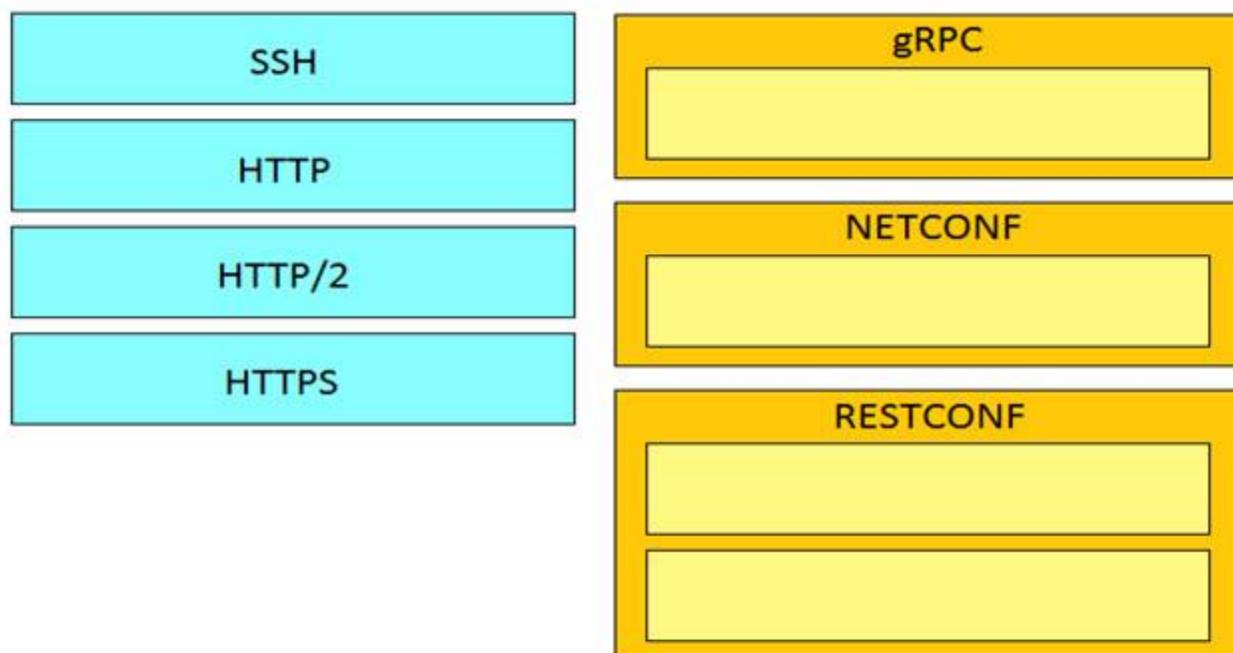
**Explanation:**

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

**NEW QUESTION 281**

- (Exam Topic 1)

Drag and drop the network automation interfaces from the left onto the transport protocols that they support on the right.



- A. Mastered
- B. Not Mastered

**Answer:** A

**Explanation:**

gRPC = C, NETCONF = A, RESTCONF = B, D OR

**NEW QUESTION 283**

- (Exam Topic 1)

Which type of threat occur when an attacker can send hostile data to an interpreter within an application?

- A. Cross-site scripting
- B. Sensitive data exposure
- C. Broken authentication
- D. Injection

**Answer:** D

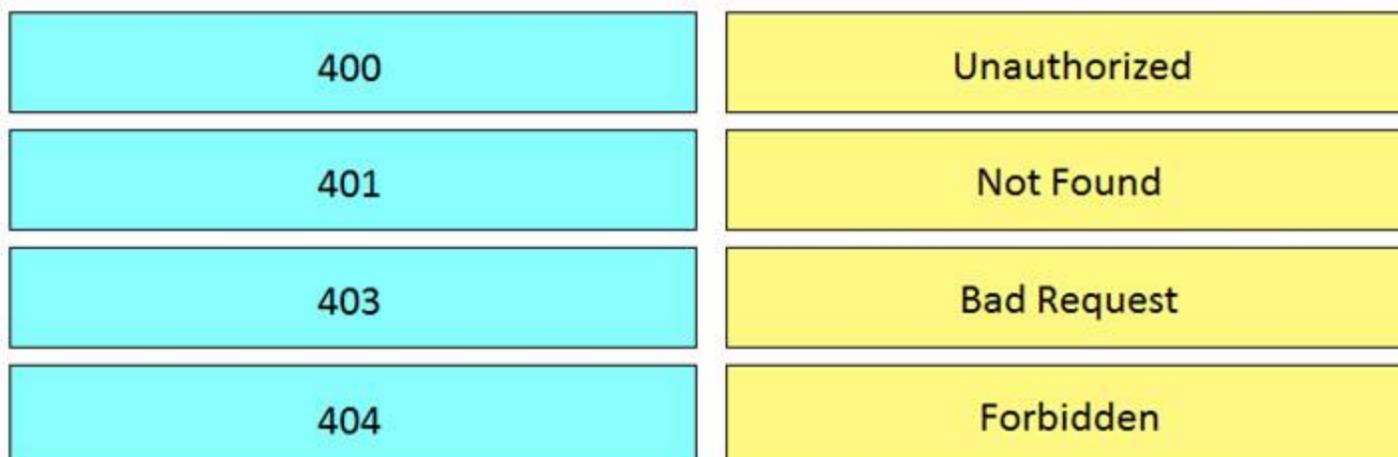
**Explanation:**

Reference: [https://owasp.org/www-project-top-ten/OWASP\\_Top\\_Ten\\_2017/Top\\_10-2017\\_A1-Injection](https://owasp.org/www-project-top-ten/OWASP_Top_Ten_2017/Top_10-2017_A1-Injection)

**NEW QUESTION 285**

- (Exam Topic 1)

Drag and drop the HTTP status codes from the left onto the correct descriptions on the right.



- A. Mastered
- B. Not Mastered

**Answer:** A

**Explanation:**

1 – B, 2 – D, 3 – A, 4 – C

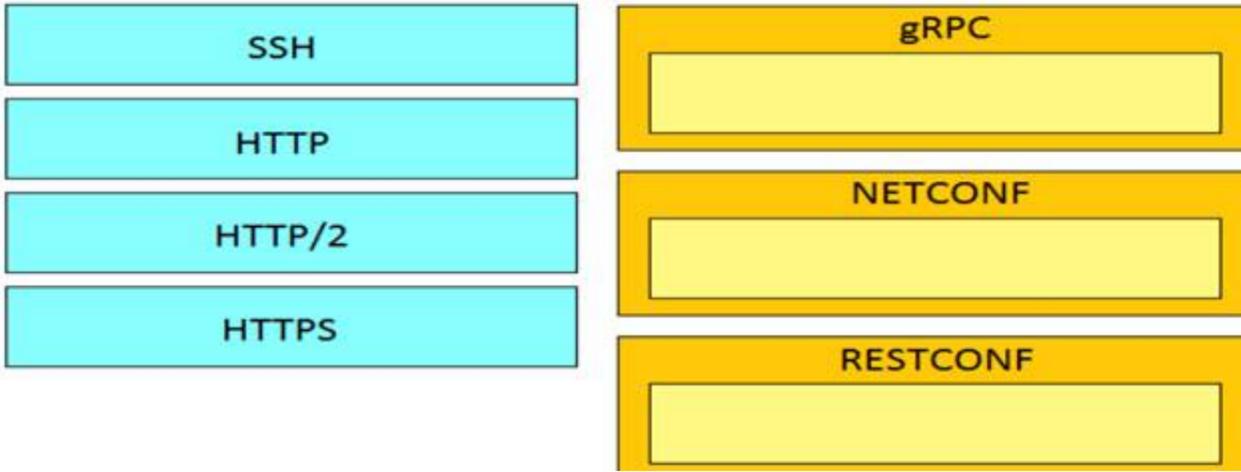
Reference:

<https://www.cisco.com/c/en/us/support/docs/security/web-security-appliance/118217-troubleshoot-wsa-00.html>

**NEW QUESTION 288**

- (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)



- A. Mastered
- B. Not Mastered

**Answer:** A

**Explanation:**

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

**NEW QUESTION 292**

- (Exam Topic 1)

Drag and drop the Python code from the left onto the correct step on the right to call a REST API.

<pre>response = requests.post(url, data=json.dumps(payload), \ headers=header, verify=False)</pre>	Step 1 – Import the correct libraries.
<pre>ticket = r_json["Token"] print (ticket)</pre>	Step 2 – Declare the necessary variable.
<pre>(_json = response.json() print(r_json)</pre>	Step 3 – Send the HTTP Request.
<pre>import requests import json</pre>	Step 4 – Format and display the response in JSON readable format.
<pre>controller = 'devnetapi.cisco.com/sandbox/dnacenter' url = 'https://' + controller + '/dna/system/api/v1/auth/token' payload = { 'username': 'devnetuser', 'password': 'pa55word' } header = { 'Content-type': 'application/json' }</pre>	Step 5 – Parse the response to display the Service Ticket.

- A. Mastered
- B. Not Mastered

**Answer:** A

**Explanation:**

<pre>response = requests.post(url, data=json.dumps(payload), \ headers=header, verify=False)</pre>	<pre>import requests import json</pre>
<pre>ticket = r_json["Token"] print (ticket)</pre>	<pre>controller = 'devnetapi.cisco.com/sandbox/dnacenter' url = 'https://' + controller + '/dna/system/api/v1/auth/token' payload = { 'username': 'devnetuser', 'password': 'pa55word' } header = { 'Content-type': 'application/json' }</pre>
<pre>(_json = response.json() print(r_json)</pre>	<pre>response = requests.post(url, data=json.dumps(payload), \ headers=header, verify=False)</pre>
<pre>import requests import json</pre>	<pre>(_json = response.json() print(r_json)</pre>
<pre>controller = 'devnetapi.cisco.com/sandbox/dnacenter' url = 'https://' + controller + '/dna/system/api/v1/auth/token' payload = { 'username': 'devnetuser', 'password': 'pa55word' } header = { 'Content-type': 'application/json' }</pre>	<pre>ticket = r_json["Token"] print (ticket)</pre>

**NEW QUESTION 296**

- (Exam Topic 1)

Refer to the exhibit.

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

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

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

tar -cpzf $DESTINATION $SOURCEFOLDER
```

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

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

- A. Mastered
- B. Not Mastered

**Answer:** A

**Explanation:**

1 – A, 2 – C, 3 – B

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

**NEW QUESTION 297**

- (Exam Topic 1)

Fill in the blanks to complete the statement.

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

- A. Mastered
- B. Not Mastered

**Answer:** A

**Explanation:**

Solution below as

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

**NEW QUESTION 300**

- (Exam Topic 1)

On which network plane is routing protocol traffic handled?

- A. data plane
- B. management plane
- C. authentication plane
- D. control plane

**Answer:** D

**Explanation:**

Reference: [https://tools.cisco.com/security/center/resources/understanding\\_cppr](https://tools.cisco.com/security/center/resources/understanding_cppr)

**NEW QUESTION 304**

- (Exam Topic 1)

Drag and Drop the Bash commands from the left onto the correct actions on the right.

<code>cd~</code>	list files in directory sorted by edited date descending
<code>cd/</code>	create directory
<code>ls -l</code>	copy file
<code>ls -t</code>	change directory to user \$HOME
<code>cp</code>	create environment variable
<code>cp -r</code>	change directory to file system root
<code>mv</code>	move file
<code>touch</code>	create file
<code>mkdir</code>	copy directory
<code>export</code>	list files in directory with details

- A. Mastered
- B. Not Mastered

**Answer:** A

**Explanation:**

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

**NEW QUESTION 309**

- (Exam Topic 1)

Fill in the blanks to complete the cURL command that invokes a RESTful API to retrieve a resource in JSON format using OAuth.

```
curl -X [ ] -H "[ ]: application/json" \
-H "[ ]: Bearer AbCdEf123456" https://localhost/api/myresource
```

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

```
curl -X GET -H "Accept: application/json" \
-H "Authorization: Bearer AbCdEf123456" https://localhost/api/myresource
```

Reference: <https://webcache.googleusercontent.com/search?q=cache:Se6d2trvMsEJ:https://blogs.cisco.com/developer/secu>

**NEW QUESTION 314**

- (Exam Topic 1)

Refer to the exhibit.

```

A - bash-3.2$ curl -H "Content-Type: application/json" -H "Authorization: Bearer
    Fj2zzykEa09lic9GK2j8LtE1HklH6oRHPQdw1Pat60i7ndtHHnWzL2b5PQmG14Kk_B9ei5ISAClY7-
    NarA-2n9H-tGgt-SxQ39iDejgcs" -i -d "{ \"roomId\":
B - \"Y2geK53sjELknosrC7SwQ5ZGL99pHgiuScB7DfnvUsr8Xx4wDKLiPORcEkryAnM3QmK9LQZsPOG4\"
    , \"text\": \"test2\" }" -X POST https://api.ciscopark.com/v1/messages C
D - HTTP/1.1 200 OK
    Via: 1.1 linkerd
    Transfer-Encoding: chunked
    TrackingID: ROUTER_5E0FE283-63EB-01BB-00ED-806BF1BD00ED
E - Date: Sat, 01 Jan 2020 00:55:31 GMT
    Server: Redacted
    Content-Type: application/json; charset=UTF-8
    Vary: Accept-Encoding
    Strict-Transport-Security: max-age=63072000; includedSybDomains; preload
F - {\"id\": \"
    YCpJf3aVovyBYcbn7lSdesNkKcgN5tlExdc6dcnPtl4Va05NfCh9MG17j0tWXQLoIPuoJ73uu7JdoX
    q9 \", \"roomId\": \"
    Y2geK53sjELknosrC7SwQ5ZGL99pHgiuScB7DfnvUsr8Xx4wDKLiPORcEkryAnM3QmK99LQZsP0G4
    \", \"roomType\": \"group\", \"text\": \"test2\", \"personId\": \"
    YcgYzL6XgtyfW81XXwqfKf7whfj23KuqWt4kLWkbb3JwEJBLVMZOKlvyDdFoppb0einNj111FcMyy5
    wD\", \"personEmail\": \"user@webex.com\", \"created\": \"2020-01-01T00:55:32.492Z\"}
    bash-3.2$
    
```

Drag and drop the descriptors from the left onto the correct parts of the API request and response on the right.

Response Headers	A
HTTP Request	B
HTTP Response	C
Request Payload	D
Request Headers	E
Response Payload	F

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

A – E, B – D, C – B, D – C, E – A, F – F

**NEW QUESTION 319**

- (Exam Topic 1)

Fill in the blanks to complete the python script to request a service ticket using the APIC-EM rest API for the user "devnetuser".

```

import requests
import json
controller = 'devnetapi.cisco.com/sandbox/apic_em'
url = "https://" + controller + "/api/va/ticket"
payload = { 'username': 'devnetuser', 'password': '371274738' }
header = { 'Content-type': 'application/json' }
response = requests.post(url, data=json.dumps(payload), \
headers=header, verify=False)
r_json = response.json()
print(r_json)
ticket = r_json["response"]["serviceTicket"]
print(ticket)

```

- A. Mastered
- B. Not Mastered

**Answer:** A

**Explanation:**

```

import requests
import json
controller = 'devnetapi.cisco.com/sandbox/apic_em'
url = "https://" + controller + "/api/va/ticket"
payload = { 'username': 'devnetuser', 'password': '371387657' }
header = { 'Content-type': 'application/json' }
response = requests.post(url, data=json.dumps(payload), \
headers=header, verify=False)
r_json = response.json()
print(r_json)
ticket = r_json["response"]["serviceTicket"]
print(ticket)

```

Reference: <https://developer.cisco.com/docs/apic-em/#!hello-world>

**NEW QUESTION 323**

- (Exam Topic 1)

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

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

**Answer:** C

**Explanation:**

Reference:

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

**NEW QUESTION 326**

- (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 328**

- (Exam Topic 1)

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

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

**Answer:** B

**NEW QUESTION 333**

- (Exam Topic 1)

What is the benefit of edge computing?

- A. It reduces network latency by moving processing closer to the data source.
- B. It simplifies security as devices and processing are brought closer together
- C. It removes the need for centralized data processing.
- D. It reduces data velocity from devices or other data sources.

**Answer:** A

**Explanation:**

Reference: <https://blogs.cisco.com/networking/time-to-get-serious-about-edge-computing>

**NEW QUESTION 338**

- (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 340**

- (Exam Topic 1)

What is the purpose of the Cisco VIRL software tool?

- A. To verify configurations against compliance standards
- B. To simulate and model networks
- C. To automate API workflows
- D. To test performance of an application

**Answer:** B

**Explanation:**

Reference: <https://www.speaknetworks.com/cisco-virl-better-gns3/>

**NEW QUESTION 345**

- (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 347**

- (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 351**

- (Exam Topic 1)

Which two use cases are supported by Meraki APIs? (Choose two.)

- A. Retrieve live streams from a Meraki Camera.
- B. Build a custom Captive Portal for Mobile Apps.
- C. Configure network devices via the Dashboard API.
- D. Build location-aware apps from Wi-Fi and LoRaWAN devices.
- E. Deploy applications onto the devices.

**Answer:** BC

**NEW QUESTION 352**

- (Exam Topic 1)

Refer to the exhibit.

```
def get_result()

    url = "https://sandboxdnac.cisco.com/dna/system/api/v1/auth/token"

    resp = requests.post(url, auth=HTTPBasicAuth(DNAC_USER, DNAC_PASSWORD))

    result = resp.json()['Token']

    return result
```

What does the python function do?

- A. It returns DNAC user and password.
- B. It returns HTTP Basic Authentication.
- C. It returns an authorization token.
- D. It reads a token from a local JSON file and posts the token to the DNAC URL.

**Answer:** C

**NEW QUESTION 353**

- (Exam Topic 1)

Refer to the exhibit.

```
json_string = """
{
    "researcher": {
        "name": "Ford Perfect",
        "species": "Betelgeusian",
        "relatives": [
            {
                "name": "Zaphod Beeblebrox",
                "species": "Betelgeusian"
            }
        ]
    }
}
"""

my_json = json.loads(json_string)
```

Which python data structure does my\_json contain?

- A. List
- B. Json
- C. Map
- D. Dict

**Answer:** D

**Explanation:**

Reference:

<https://stackoverflow.com/questions/34764979/loading-python-string-with-u-as-json?noredirect=1&lq=1>

**NEW QUESTION 354**

- (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 358**

- (Exam Topic 1)

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

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

**Answer:** D

**NEW QUESTION 360**

- (Exam Topic 1)

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

- A. A router along the path is misrouting the packets in a wrong direction.
- B. A router along the path has the wrong time.
- C. The server is too far away and the packets require too much time to reach it
- D. The server is too loaded and the connection could not be handled in time

**Answer:** A

**NEW QUESTION 364**

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

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



**NEW QUESTION 367**

- (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 372**

- (Exam Topic 3)

A developer must test the performance and reliability of an application. After functional and load tests are run, the application crashes due to traffic spikes from users. Which type of API constraint must be implemented to maintain reliability?

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

**Answer:** A

**NEW QUESTION 373**

- (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 378**

- (Exam Topic 3)

What is a characteristic of RPC APIs compared to REST APIs?

- A. Authentication is done over provisions for the service caller and vice versa for RPC API, and REST API uses HTTP headers for authentication.
- B. All communications between the client and server must be stateless for RPC API, and REST API is stateful.
- C. The architecture model for RPC API is resource-focused, and REST API is procedure-focused.
- D. The data payload must be in JSON format for RPC API, and REST API allows JSON and XML formats.

**Answer:** A

**NEW QUESTION 381**

- (Exam Topic 3)

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

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

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

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

**NEW QUESTION 383**

- (Exam Topic 3)

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

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

Answer: C

**NEW QUESTION 384**

- (Exam Topic 3)

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

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

Answer: D

**NEW QUESTION 387**

- (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
    
```

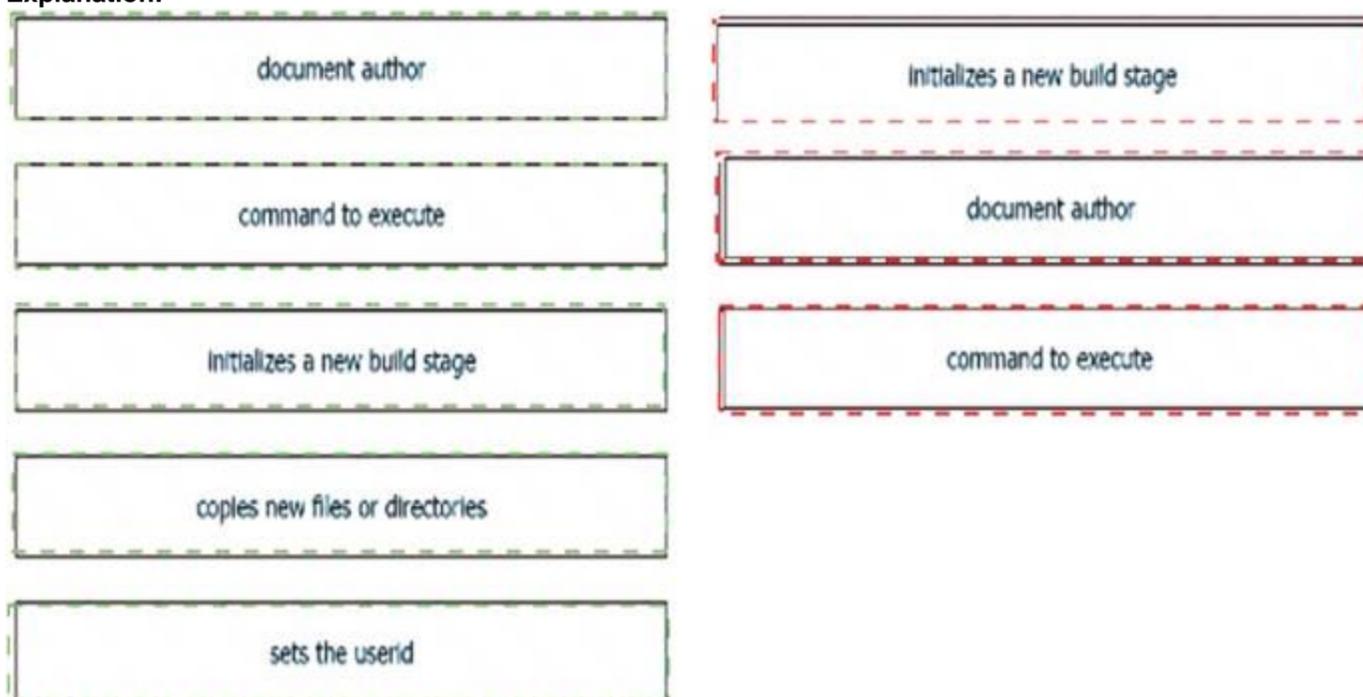
Refer to the exhibit. Drag and drop the Dockerfile contents from the left onto the functions on the right that create a container image to run traceroute to track network path to specific targets. Not all options are used.

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:



**NEW QUESTION 389**

- (Exam Topic 3)

A developer is running an application that connects to the Cisco website and collects data. The application will be hosted in a local data center and the data will need to be collected on a frequent basis. The application client requires certain environmental variables to be set before the run. Which Bash command sets the environmental variables for a Linux system?

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

Answer: D

**NEW QUESTION 390**

- (Exam Topic 3)

Refer to the exhibit.

```

1 import requests
2
3 url = "https://api.meraki.com/api/v0/organizations/{{organizationId}}/insight/
* monitoredMediaServers"
4
5 payload = {
6     "name": "Sample VoIP Provider",
7     "address": "123.123.123.1"
8 }
9 headers = {
10    'Accept': '*/*',
11    'Content-Type': 'application/json'
12 }
13
14 response = requests.request("POST", url, headers=headers, data=payload)
15
16 print(response.text.encode('utf8'))

```

Which workflow does the script automate?

- A. retrieves a media server that is being monitored
- B. updates a media server that is being monitored
- C. adds a media server to be monitored
- D. deletes a media server that is being monitored

Answer: C

**NEW QUESTION 392**

- (Exam Topic 3)

Which technology is responsible for resolving a host name to an IP address?

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

**Answer:** A

**NEW QUESTION 395**

- (Exam Topic 3)

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

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

- A. Mastered
- B. Not Mastered

**Answer:** A

**Explanation:**

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

**NEW QUESTION 399**

- (Exam Topic 3)

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

- A. to find unexpected failures in the tests
- B. to demonstrate that the tests fail for expected reasons
- C. to ensure that the tests pass
- D. to provide proof of the work carried out

**Answer:** D

**NEW QUESTION 401**

- (Exam Topic 3)

Drag and drop the code from the bottom onto the box where the code is missing to enable ports on a switch by using RESTCONF. Not all options are used.

```
def enable_function(if_name, if_status, if_type):
    headers = {'Accept': 'application/yang-data+json',
              'Content-Type': 'application/ [ ] '}
    payload = {
        "[ ]": {
            "name": if_name,
            "enabled": if_status,
            "type": if_type,
        }
    }
    [ ] = 'https://192.168.1.1:8443'
    restconf_url = '/restconf/data/ietf-interfaces:interfaces/interface'
    res = requests.put(f'{base_url}{restconf}={if_name}',
                      headers=headers, json=payload,
                      auth=('cisco', 'secret'), verify=False)

enable_function('Loopback1', true, '[ ]')
```

- |                                                          |                                                            |
|----------------------------------------------------------|------------------------------------------------------------|
| <input type="text" value="yang-data+json"/>              | <input type="text" value="application/xml"/>               |
| <input type="text" value="ietf-interfaces:interface"/>   | <input type="text" value="iana-if-type:softwareLoopback"/> |
| <input type="text" value="base_url"/>                    | <input type="text" value="run_function"/>                  |
| <input type="text" value="iana-if-type:ethernetCsmacd"/> |                                                            |

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

```
def enable_function(if_name, if_status, if_type):
    headers = {'Accept': 'application/yang-data+json',
              'Content-Type': 'application/ yang-data+json '}
    payload = {
        " ietf-interfaces:interface ": {
            "name": if_name,
            "enabled": if_status,
            "type": if_type,
        }
    }
    base_url = 'https://192.168.1.1:8443'
    restconf_url = '/restconf/data/ietf-interfaces:interfaces/interface'
    res = requests.put(f'{base_url}{restconf}={if_name}',
                      headers=headers, json=payload,
                      auth=('cisco', 'secret'), verify=False)

enable_function('Loopback1', true, ' iana-if-type:ethernetCsmacd ')
```

- |                                                          |                                                            |
|----------------------------------------------------------|------------------------------------------------------------|
| <input type="text" value="yang-data+json"/>              | <input type="text" value="application/xml"/>               |
| <input type="text" value="ietf-interfaces:interface"/>   | <input type="text" value="iana-if-type:softwareLoopback"/> |
| <input type="text" value="base_url"/>                    | <input type="text" value="run_function"/>                  |
| <input type="text" value="iana-if-type:ethernetCsmacd"/> |                                                            |

**NEW QUESTION 405**

- (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 410**

- (Exam Topic 3)

Drag and drop the API characteristics from the left onto the categories on the right.

The API is seen as a function call.	REST   
There is communication between server and client.	
It follows a resource-oriented model.	RPC   
The API can be stateless.	

- A. Mastered
- B. Not Mastered

**Answer:** A

**Explanation:**

Graphical user interface, application Description automatically generated

**NEW QUESTION 413**

- (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 414**

- (Exam Topic 3)

Which IP service synchronizes the time across devices?

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

**Answer:** B

**NEW QUESTION 416**

- (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 417**

- (Exam Topic 3)

Which network constraint causes the performance of the application to decrease as the number of users accessing the application increases?

- A. latency
- B. loss
- C. bandwidth
- D. jitter

**Answer: C**

**NEW QUESTION 420**

- (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 424**

- (Exam Topic 3)

The screenshot shows a documentation page for Cisco Security APIs. On the left is a navigation menu with sections for 'Introduction', 'API Workflow' (containing 10 numbered items with GET/POST methods), and 'NGFW' (containing 5 items with GET/POST methods). The main content area has a heading 'Cisco Security APIs' followed by a paragraph explaining the collection's goal. Below that is a heading 'API Workflow' and a specific example: 'GET 1.) Find all events where Malware Executed' with a URL: 'https://:@amp.dcloud.cisco.com/v1/events?connector\_guid[]=&event\_type[]=1107296272'. Below the URL is a description: 'Get a listing of all the events for a specific computer when the quarantine failed'. At the bottom of the main content area is the label 'PARAMS'.

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

```
import requests

[ ] = "https://fmc-hostname/api/fmc_tid/v1/domain//tid/source"

payload = {
    "name": "Threat Grid Ransomware DNS",
    "delivery": "url",
    "uri": "https://panacea.threatgrid.com/api/v3/feeds"+
    "/ransomware-dns 2017-12-08.stix?api_key=",
    "refresh": 1440,
    "version": "1.0.0",
    "params": {
        "selfSignedServerCertificate": "true",
        "hostnameVerifier": "allow_all"
    },
    "property": {
        "ttl": 90,
        "publish": true,
        "action": "monitor"
    }
}

headers = {
    'X-auth-access-token': 'access_token', ' [ ] ': 'application/json'
}

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

url	Encoding	base_url	Content-Type	post
request	payload			

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

```
import requests

[ url ] = "https://fmc-hostname/api/fmc_tid/v1/domain//tid/source"

payload = {
    "name": "Threat Grid Ransomware DNS",
    "delivery": "url",
    "uri": "https://panacea.threatgrid.com/api/v3/feeds"+
    "/ransomware-dns 2017-12-08.stix?api_key=",
    "refresh": 1440,
    "version": "1.0.0",
    "params": {
        "selfSignedServerCertificate": "true",
        "hostnameVerifier": "allow_all"
    },
    "property": {
        "ttl": 90,
        "publish": true,
        "action": "monitor"
    }
}

headers = {
    'X-auth-access-token': 'access_token', ' [ Content-Type ] ': 'application/json'
}

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

url	Encoding	base_url	Content-Type	post
request	payload			

**NEW QUESTION 426**

- (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?

- A. 

```
77 query_string_params = {'platformId': 'AIR-AP1141N-A-K9'}
```
- B. 

```
21 print(item['id'], item['hostname'])
```
- C. 

```
24 print(item['id'], item['hostname'], item['managementIpAddress'])
```
- D. 

```
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 430**

- (Exam Topic 3)

Which OWASP threat takes advantage of a web application that the user has already authenticated to execute an attack?

- A. phishing
- B. DoS
- C. brute force attack
- D. CSRF

Answer: D

**Explanation:**

Cross-Site Request Forgery (CSRF) is an attack that forces an end user to execute unwanted actions on a web application in which they're currently authenticated.

<https://owasp.org/www-community/attacks/csrf>

**NEW QUESTION 433**

- (Exam Topic 3)

**SDK Documentation:**

**OrganizationController:**

get\_organizations()  
get\_network\_device(dict)

**DevicesController:**

get\_network\_devices(id)

**NetworksController:**

get\_organization\_networks(dict)

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

```

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

api_key = "API_KEY"
client = MerakiSdkClient(api_key)

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

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

- A. Mastered
- B. Not Mastered

**Answer:** A

**Explanation:**

```

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

api_key = "API_KEY"
client = MerakiSdkClient(api_key)

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

- 
- 
- 
- 
- 
- 

**NEW QUESTION 438**

- (Exam Topic 3)

**/api/access/global/rules** API operations on global access rules. GET PUT PATCH **POST** DELETE

**Implementation Notes**  
Add a new global access rule.

**Parameters**

Parameter	Required	Description	Type	Data Type
body	true	Definition of the global access rule to be added.	body	ExtendedACE

**Response**  
Response Content Type   
Response Object **ExtendedACE**

**ExtendedACE Model**

Field	Value	Description	Constraints
sourceAddress*	object	source address in the ace	None
destinationAddress*	object	destination address in the ace	None
kind*	string	The kind of this resource object	None
dstSecurity	object	destination security group in the ace	None
dstSecurity. Value	string		None
active*	boolean	shows if the rule is active or inactive, default is active	None
destinationService*	object	destination service in the ace	None
permit*	boolean	shows if the action is permit or deny	None

Refer to the exhibit. Drag and drop the code from the bottom onto the box where the code is missing to complete the function that adds a new global access rule that denies traffic using the Cisco ASA REST API. Not all options are used.

```
import requests as req
def add_rule(token, asa IP, dest v4Address):
    data = {
        "destinationAddress": {
            "kind": "IPv4Address",
            "value": dest v4Address
        },
        "destinationService": {
            "kind": "NetworkProtocol",
            "value": "ip"
        },
        [redacted]
        "active": True,
        "sourceAddress": {
            "kind": "AnyIPAddress",
            "value": "any4"
        }
    }
    objectRequestUrl='https://' + [redacted]
    res = req.request([redacted]
                      json=data,verify=False)
    [redacted]
    print("Success.")
else:
    print("Failed")
```

```
if res.status_code == 201:
if res.status_code == 203:
+ asa_IP + "/api/access/global/rules"
'POST', objectRequestUrl,
"permit": False,
+ asa_IP = "/access/global/rules"
```

- A. Mastered
- B. Not Mastered

**Answer:** A

**Explanation:**

Graphical user interface, text, application, email Description automatically generated

**NEW QUESTION 442**

- (Exam Topic 3)

```
1 - hosts: nxos_rtr
2 gather_facts: false
3 tasks:
4 - nxos_hsrp:
5   group: "{{ item.group }}"
6   vip: "{{ item.vip }}"
7   priority: 115
8   interface: "{{ item.interface }}"
9   preempt: enabled
10  auth_type: md5
11  auth_string: "s3cuR3"
12  version: 2
13  host: "{{ hostvars['rtr-1a']['ansible_ssh_host'] }}"
14  with_items:
15    - "{{ hsrp_groups }}"
16  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 445**

- (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 448**

- (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 453**

- (Exam Topic 3)

A development team is creating an application used for contactless payments. The application must: Be web-based Capture and process the credit card information for a purchase.

Which security action must the web application use to gather and process the private customer data?

- A. Enable RATs to monitor the web application remotely.
- B. Disable botnets to eliminate risks.
- C. Disable TLS to increase the connection speed.
- D. Enable the encryption of network traffic.

**Answer:** D

**NEW QUESTION 454**

- (Exam Topic 3)

Refer to the exhibit.

```

module ietf-interface {
  namespace "urn:ietf:params:xml:ns:yang:ietf-interfaces";
  prefix if;
  import ietf-yang-types {
    prefix yang;
  }
  container interfaces-state {
    list interface {
      key "name";
      leaf name {
        type string;
      }
      leaf admin-status {
        type enumeration {
          enum up {
            value 1;
          }
          enum down {
            value 2;
          }
          enum testing {
            value 3;
          }
        }
      }
      leaf if-index {
        type int32 {
          range "1..2147483647"
        }
      }
      container statistics {
        leaf in-octets {
          type yang:counter64;
        }
        leaf in-unicast-pkts {
          type yang:counter64;
        }
      }
    }
  }
}

```

Which XML snippet has interface information that conforms to the YANG model?

A. Text Description automatically generated

```

<interfaces-state
xmlns="urn:ietf:params:xml:ns:yang:ietf-interfaces"
xmlns:if="urn:ietf:params:xml:ns:yang:ietf-interfaces">
  <interface name="GigabitEthernet1">
    <admin-status>1</admin-status>
    <if-index>1</if-index>
    <statistics>
      <in-octets>408164820</in-octets>
      <in-unicast-pkts>728061</in-unicast-pkts>
    </statistics>
  </interface>
</interfaces-state>

```

Text

Description automatically generated

```

<interfaces-state
xmlns="urn:ietf:params:xml:ns:yang:ietf-interfaces"
xmlns:if="urn:ietf:params:xml:ns:yang:ietf-interfaces">
  <interface>
    <name>GigabitEthernet1</name>
    <admin-status>up</admin-status>
    <if-index>1</if-index>
    <in-octets>408164820</in-octets>
    <in-unicast-pkts>728061</in-unicast-pkts>
  </interface>
</interfaces-state>

```

B. Text Description automatically generated

```
<interfaces-state
xmlns="urn:ietf:params:xml:ns:yang:ietf-interfaces"
xmlns:if="urn:ietf:params:xml:ns:yang:ietf-interfaces">
  <interface>
    <name>GigabitEthernet1</name>
    <admin-status>up</admin-status>
    <if-index>1</if-index>
    <statistics>
      <in-octets>408164820</in-octets>
      <in-unicast-pkts>728061</in-unicast-pkts>
    </statistics>
  </interface>
</interfaces-state>
```

C. Text Description automatically generated

```
<interfaces-state
xmlns="urn:ietf:params:xml:ns:yang:ietf-interfaces"
xmlns:if="urn:ietf:params:xml:ns:yang:ietf-interfaces">
  <interface>
    <name>GigabitEthernet1</name>
    <admin-status>1</admin-status>>
    <if-index>1</if-index>
    <statistics>
      <in-octets>408164820</in-octets>
      <in-unicast-pkts>728061</in-unicast-pkts>
    </statistics>
  </interface>
</interfaces-state>
```

**Answer:** C

**Explanation:**

<https://datatracker.ietf.org/doc/id/draft-ietf-netmod-interfaces-cfg-01.txt> <admin-status>up</admin-status>

**NEW QUESTION 459**

- (Exam Topic 3)

What are two benefits of using classes over functions when writing applications? (Choose two.)

- A. improved readability
- B. increased compatibility
- C. variable reusability
- D. increased performance
- E. code organization

**Answer:** AC

**NEW QUESTION 463**

- (Exam Topic 3)

```
import requests
from requests.auth import HTTPBasicAuth

user= "user"
password= "PASSWORD"

token=requests.post('https://<DNAC ADDRESS>/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 467**

- (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 470**

- (Exam Topic 3)

### Object Lookup

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

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

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

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

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

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

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

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

```

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

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

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

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

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

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

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

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

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

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

- fvBD
- fvTenant
- ClassQuery
- bdname
- DnQuery
- ClassName
- commit

**NEW QUESTION 473**

- (Exam Topic 2)  
Which configuration management tool has an agentless capability?

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

Answer: C

**NEW QUESTION 476**

- (Exam Topic 2)

In test-driven development, what are two of the green bar patterns? (Choose two.)

- A. another test
- B. break
- C. triangulate
- D. starter test
- E. fake it

**Answer:** CE

**Explanation:**

<https://blog.baudson.de/blog/test-driven-development-green-bar-patterns>

**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	content	
status_code	200	content_type
403	status	

- A. Mastered
- B. Not Mastered

**Answer:** A

**Explanation:**

Graphical user interface, text Description automatically generated

**NEW QUESTION 482**

- (Exam Topic 2)

What is a capability of an agentless configuration management system?

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

**Answer:** D

**NEW QUESTION 484**

- (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 488**

- (Exam Topic 3)



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

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

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

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

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

- response
- reply
- dna\_api\_auth
- requests
- json
- list\_dna\_devices
- list devices

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

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

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

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

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

response	reply	dna_api_auth	requests
json	list_dna_devices	list devices	

**NEW QUESTION 490**

- (Exam Topic 3)

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

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

**Answer:** A

**NEW QUESTION 494**

- (Exam Topic 3)

What is a comparison of YAML and JSON?

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

**Answer:** B

**Explanation:**

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

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

**NEW QUESTION 496**

- (Exam Topic 3)

```
import os
import requests

# username and password

API_USER_NAME = "devnetuser"
API_PASSWORD = os.environ['API_PASSWORD']

requests.get('https://api.cisco.com/end-service', auth=(API_USER_NAME, API_PASSWORD))
```

Refer to the exhibit. An engineer must authorize a REST API call. The API password is "Cisco123!". Which Bash command must be placed in the code to authorize the call?

- A. mkdir API\_PASSWORD=Cisco123!
- B. set API\_PASSWORD=Cisco123!
- C. cp API\_PASSWORD=Cisco123!
- D. export API\_PASSWORD=Cisco123!

Answer: D

**NEW QUESTION 499**

- (Exam Topic 3)

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

Returns list of interfaces by specified device.

**Parameters**

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

**Returns**

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

**Return type**

MyDict

**Raises**

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

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

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

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

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

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

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

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

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

```

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

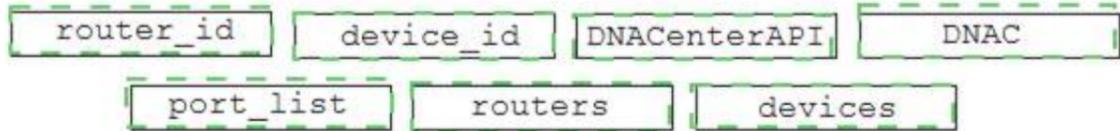
dnac = DNACenterAPI(username='cisco', password='secret',
                    base_url=base_url, version='1.3.3', verify=False)

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

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

# Output
# The list of interfaces contains 54 items.

```



**NEW QUESTION 501**

- (Exam Topic 3)

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

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

**Answer: B**

**NEW QUESTION 504**

- (Exam Topic 3)

Which function does a router provide to a network?

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

**Answer: B**

**NEW QUESTION 507**

- (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 510**

- (Exam Topic 3)

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

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

**Answer: A**

**NEW QUESTION 515**

- (Exam Topic 3)

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

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

**Answer: B**

**NEW QUESTION 516**

- (Exam Topic 3)

```

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

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

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

**Answer: A**

**NEW QUESTION 518**

- (Exam Topic 3)

Refer to the exhibit.

```

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

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

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

**Answer: D**

**NEW QUESTION 523**

- (Exam Topic 3)

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

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

**Answer: D**

**Explanation:**

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

**NEW QUESTION 527**

- (Exam Topic 3)

The screenshot shows the Cisco Intersight API documentation for the endpoint `POST Create Server VMedia Policy`. The URL is `https://www.intersight.com/api/v1/vmedia/Policies`. The headers section lists the following:

Header	Value
Accept	application/json
Authorization	Signature {{httpsig}}
Digest	{{computed-digest}}
Date	{{current-date}}
Content-Type	application/json

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 by using the Cisco SDK. Not all options are used.

```
import sys, json, argparse
from intersight.intersight_api_client import IntersightApiClient
from intersight.apis import asset_device_registration_api, asset_device_claim_api

result = dict(changed=False)

parser = argparse.ArgumentParser()
parser.add_argument('-a', '--api_params', default='intersight_api_params.json')
parser.add_argument('-t', '--target_host', dest='hostname', required=True)
args = parser.parse_args()
with open(args.api_params, 'r') as api_file:
    intersight_api_params = json.load( )
api_instance = IntersightApiClient(
    host=intersight_api_params[' '],
    private_key=intersight_api_params['api_private_key_file'],
    api_key_id=intersight_api_params['api_key_id'],
)
api_handle = asset_device_registration_api.AssetDeviceRegistrationApi(api_instance)

kwargs = dict(filter="ConnectionStatus eq 'Connected'")
= api_handle.asset_device_registrations_get(** )
for device in api_result.results:
    if device.device_ip_address[0] == args.hostname:
        api_handle = asset_device_claim_api.AssetDeviceClaimApi(api_instance)
        api_handle.asset_device_claims_moid_delete(moid=device.device_claim.moid)
        result['changed'] = True
        break
```

- kwargs
- args
- api\_file
- api\_key
- api\_base\_uri
- result
- api\_result

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

```
import sys, json, argparse
from intersight.intersight_api_client import IntersightApiClient
from intersight.apis import asset_device_registration_api, asset_device_claim_api

result = dict(changed=False)

parser = argparse.ArgumentParser()
parser.add_argument('-a', '--api_params', default='intersight_api_params.json')
parser.add_argument('-t', '--target_host', dest='hostname', required=True)
args = parser.parse_args()
with open(args.api_params, 'r') as api_file:
    intersight_api_params = json.load( api_file )
api_instance = IntersightApiClient(
    host=intersight_api_params[ api_base_uri ],
    private_key=intersight_api_params[ api_private_key_file ],
    api_key_id=intersight_api_params[ api_key_id ],
)
api_handle = asset_device_registration_api.AssetDeviceRegistrationApi(api_instance)

kwargs = dict(filter="ConnectionStatus eq 'Connected'")
result = api_handle.asset_device_registrations_get(** kwargs )
for device in api_result.results:
    if device.device_ip_address[0] == args.hostname:
        api_handle = asset_device_claim_api.AssetDeviceClaimApi(api_instance)
        api_handle.asset_device_claims_moid_delete(moid=device.device_claim.moid)
        result['changed'] = True
        break
```

kwargs    args    api\_file    api\_key    api\_base\_uri    result

api\_result

**NEW QUESTION 531**

- (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 535**

- (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 536**

- (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.

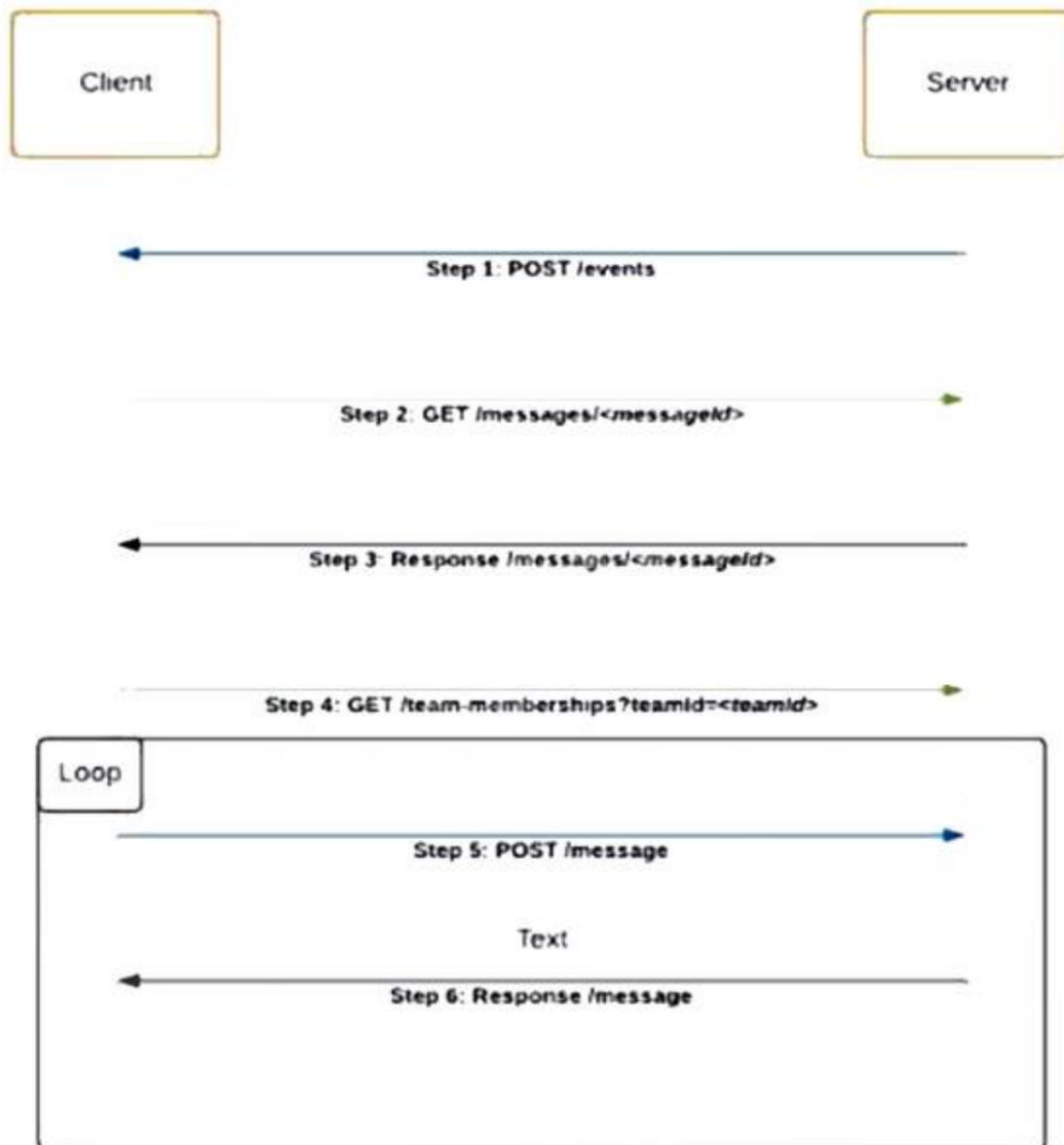
**Answer: D**

**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 538**

- (Exam Topic 3)



Refer to the exhibit. Which code snippet represents the sequence.

A.

```
@flask_app.route('/events', methods=['POST'])
def webex_teams_webhook_events():
    json_data = request.json['data']
    response = requests.get(MESSAGE_URL +
    json_data['id'], headers=headers)
    if response.json()['text'] == 'Alert':
        response = requests.get(Team_MEMBERSHIPS_URL,
        headers=headers, params=params)
        for info in response.json()['items']:
            data = {'personId': info['personId'], 'text':
            'Alert'}
            response = requests.post(MESSAGES_URL,
            headers=headers, params=params)
```

B. @flask\_app.route('/events', methods=['POST'])

```
def webex_teams_webhook_events():
    json_data = request.json['data']
    if response.json()['text'] == 'Alert':
        response = requests.get(MESSAGE_URL +
        json_data['id'], headers=headers)
        response = requests.get(Team_MEMBERSHIPS_URL,
        headers=headers, params=params)
        for info in response.json()['items']:
            data = {'personId': info['personId'],
            'text': 'Alert'}
            response = requests.post(MESSAGES_URL,
            headers=headers, params=params)
```

C. @flask\_app.route('/events', methods=['POST'])

```
def webex_teams_webhook_events():
    json_data = request.json['data']
    response = requests.post(MESSAGE_URL +
    json_data['id'], headers=headers)
    if response.json()['text'] == 'Alert':
        for info in response.json()['items']:
            response = requests.get(Team_MEMBERSHIPS_URL,
            headers=headers, params=params)
            data = {'personId': info['personId'], 'text':
            'Alert'}
            response = requests.get(MESSAGES_URL,
            headers=headers, params=params)
```

D. @flask\_app.route('/events', methods=['POST'])

```
def webex_teams_webhook_events():
    json_data = request.json['data']
    response = requests.get(Team_MEMBERSHIPS_URL,
    headers=headers, params=params)
    if response.json()['text'] == 'Alert':
        response = requests.get(MESSAGE_URL +
        json_data['id'], headers=headers)
        for info in response.json()['items']:
            data = {'personId': info['personId'], 'text':
            'Alert'}
            response = requests.post(MESSAGES_URL,
            headers=headers, params=params)
```

Answer: C

**NEW QUESTION 539**

- (Exam Topic 3)

Which protocol is used for clock synchronization between network devices?

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

**Answer:** D**Explanation:**

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

**NEW QUESTION 540**

- (Exam Topic 3)

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

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

**Answer:** AD**NEW QUESTION 543**

- (Exam Topic 3)

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

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

**Answer:** C**NEW QUESTION 546**

- (Exam Topic 3)

A developer writes an application that refines data in temporary secure file storage hosted on the public cloud. Data will be deleted after processing and does not contain any private information. What is the advantage that a public cloud deployment provides to the developer?

- A. high security with encryption
- B. ease in infrastructure management
- C. flexible development
- D. bespoke services

**Answer:** B**NEW QUESTION 551**

- (Exam Topic 3)

Which protocol runs over TCP port 830?

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

**Answer:** A**NEW QUESTION 556**

- (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 557**

- (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 562**

- (Exam Topic 3)

Refer to the exhibit.

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

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

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

**Answer:** B

**Explanation:**

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

**NEW QUESTION 567**

- (Exam Topic 3)

What is the purpose of grouping devices in a VLAN?

- A. Devices communicate as if they are connected on the same wire.
- B. Multicast network traffic is limited to the VLAN connected devices.
- C. Unicast messages are limited to the clients connected on the same VLAN.
- D. Network traffic is load balanced between the devices connected to the VLAN.

**Answer:** B

**NEW QUESTION 570**

- (Exam Topic 3)

An engineer deploys a Cisco CSR 1000 V instance to a virtual machine. The engineer must output the device configuration in JSON format. Which protocol is used for this task?

- A. YANG
- B. NETCONF
- C. SNMP
- D. RESTCONF

**Answer:** D

**NEW QUESTION 572**

- (Exam Topic 3)

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

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

requests.packages.urllib3.disable_warnings()

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

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

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

if __name__ == "__main__":
    get_device_list()
```

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

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

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

requests.packages.urllib3.disable_warnings()

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

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

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

if __name__ == "__main__":
    get_device_list()
```

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

**NEW QUESTION 577**

- (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 581**

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