



## **Cisco**

### **Exam Questions 200-901**

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

## About Exambible

*[Your Partner of IT Exam](#)*

## Found in 1998

Exambible is a company specialized on providing high quality IT exam practice study materials, especially Cisco CCNA, CCDA, CCNP, CCIE, Checkpoint CCSE, CompTIA A+, Network+ certification practice exams and so on. We guarantee that the candidates will not only pass any IT exam at the first attempt but also get profound understanding about the certificates they have got. There are so many alike companies in this industry, however, Exambible has its unique advantages that other companies could not achieve.

## Our Advances

### \* 99.9% Uptime

All examinations will be up to date.

### \* 24/7 Quality Support

We will provide service round the clock.

### \* 100% Pass Rate

Our guarantee that you will pass the exam.

### \* Unique Gurantee

If you do not pass the exam at the first time, we will not only arrange FULL REFUND for you, but also provide you another exam of your claim, ABSOLUTELY FREE!

#### NEW QUESTION 1

- (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 2

- (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 3

- (Exam Topic 2)

Which protocol runs over TCP port 22?

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

**Answer:** A

#### NEW QUESTION 4

- (Exam Topic 2)

Which protocol runs over TCP port 23?

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

**Answer:** D

#### NEW QUESTION 5

- (Exam Topic 2)

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

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

- A. Mastered
- B. Not Mastered

**Answer:** A

#### Explanation:

Diagram Description automatically generated

#### NEW QUESTION 6

- (Exam Topic 2)

Drag and drop the code from the bottom onto the box where the code is missing in the Python script to complete a function to return all the clients on a network by

using the Cisco Meraki Dashboard API. Not all options are used.

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

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

client

application/json

application/xml

clients

X-Cisco-Meraki-API-Key

networks

Authorization: Bearer

- A. Mastered  
B. Not Mastered

**Answer: A**

**Explanation:**

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

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

client

application/xml

Authorization: Bearer

## NEW QUESTION 7

- (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 8

- (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,
31                     verify=False)
```

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

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

**Answer: A**

#### NEW QUESTION 9

- (Exam Topic 2)

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 10

- (Exam Topic 2)

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

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

**Answer: D**

#### NEW QUESTION 10

- (Exam Topic 2)

Refer to the exhibit.

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

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

- A. Change the verify=False setting in the request to verify=True to enable HTTP Basic authentication

- B. Modify the method from LOGIN to GET and supply the username ;password value as JSON payload
- C. Verify that the username and password values imported from the configuration file ate still valid.
- D. Insert an Authorization header with the values username password from the supplied configuration file.

**Answer: C**

#### NEW QUESTION 14

- (Exam Topic 2)

Refer to the exhibit.

```
1 def enable_function(if_name, if_status, if_type):
2     headers = {'Accept': 'application/yang-data+json',
3               'Content-Type': 'application/yang-data+json'}
4     payload = {
5         "ietf-interfaces:interface": {
6             "name": if_name,
7             "enabled": if_status,
8             "type": if_type,
9         }
10    }
11    base_url = 'https://192.168.1.1:8443'
12    restconf_url = '/restconf/data/ietf-interfaces:interfaces/interface'
13
14    res = requests.put(f'{base_url}{restconf_url}={if_name}',
15                      headers=headers, json=payload,
16                      auth=('cisco', 'secret'), verify=False)
```

A network engineer wants to automate the port enable/disable process on specific Cisco switches. The engineer creates a script to send a request through RESTCONF and uses ietf as the YANG model and JSON as payload. Which command enables an interface named Loopback1?

- A. enable\_function(Loopback1, true, 'iana-if-type:softwareLoopback')
- B. enable\_function('iana-if-type:softwareLoopback', Loopback1, true,)
- C. def enable\_function('iana-if-type:softwareLoopback', Loopback1, false,)
- D. def enable\_function(Loopback1, true, 'iana-if-type:softwareLoopback')

**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 23

- (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 24

- (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 27

- (Exam Topic 2)

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

- A. Branching code
- B. Merge of code
- C. Checkout of code
- D. Committing code

**Answer:** D

### NEW QUESTION 31

- (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 34

- (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 38

- (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 40

- (Exam Topic 2)

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

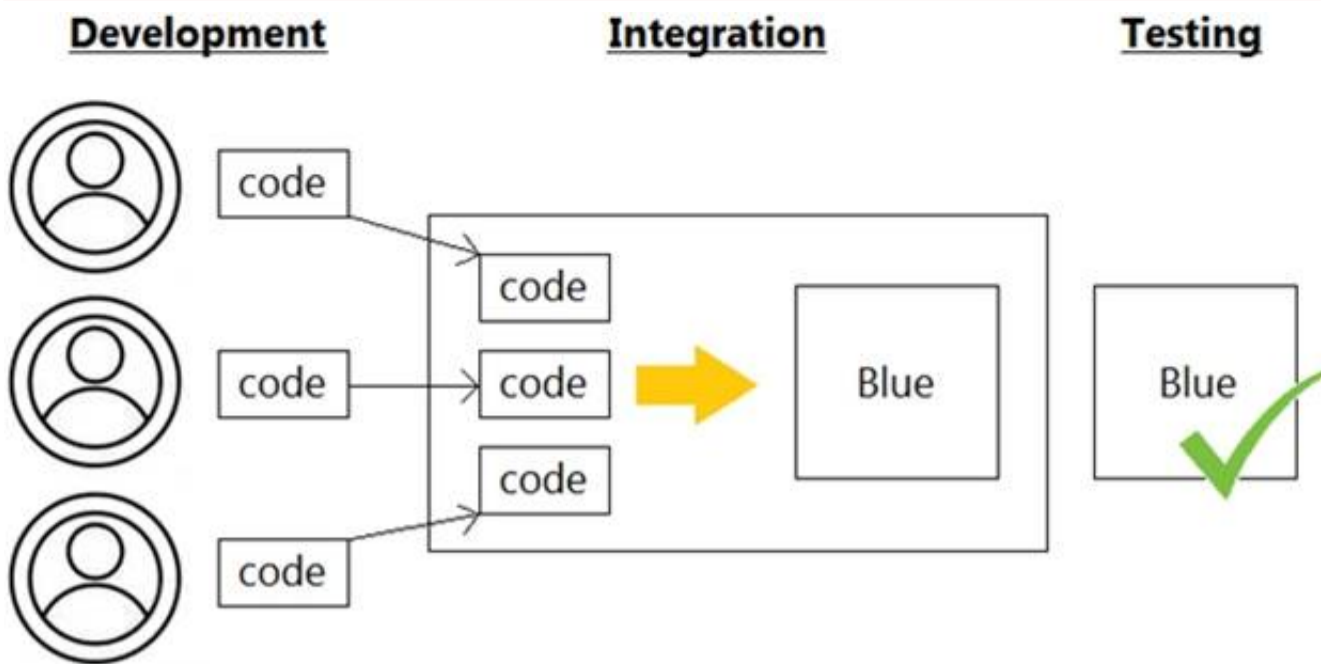
- A. Meraki  
B. RESTCONF/YANG  
C. SD-WAN  
D. DNAC

**Answer:** B

#### NEW QUESTION 43

- (Exam Topic 2)

Refer to the exhibit.



Which infrastructure automation method is shown?

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

**Answer:** C

#### NEW QUESTION 46

- (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 50

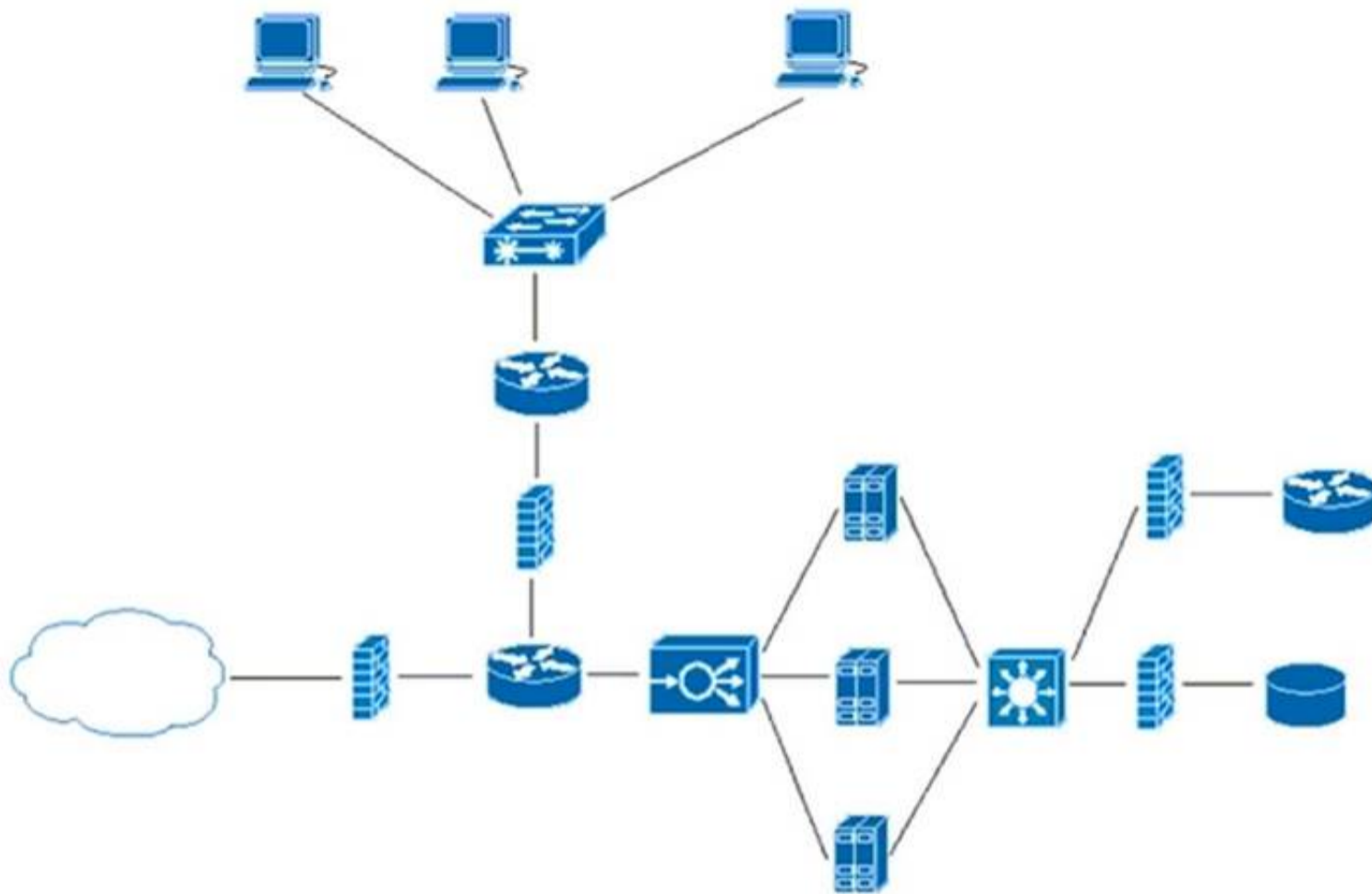
- (Exam Topic 2)

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 55**  
 - (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 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 "GV2bmV0dXNlcjpDaXNj=". Which payload and header combination must be used for authentication?

- A.
- ```
payload = {
    'Authorization' : 'Basic GV2bmV0dXNlcjpDaXNj=',
    'Content-Type' : 'application/json'
}
headers= {}
```
- B.
- ```
payload = {}
headers= {
    'Authorization' : 'Basic GV2bmV0dXNlcjpDaXNj=',
    'Content-Type' : 'application/json'
}
```
- C.
- ```
payload = {
    'Authorization' : 'Bearer GV2bmV0dXNlcjpDaXNj=',
    'Content-Type' : 'application/json'
}
headers= {}
```
- D.
- ```
payload = {}
headers= {
    'Authorization' : 'Bearer GV2bmV0dXNlcjpDaXNj=',
    '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 is the purpose of the first three pairs of digits in a MAC address?

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

**Answer:** D

**NEW QUESTION 65**

- (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 69**

- (Exam Topic 2)

What are two use cause where webhooks are effective? (Choose two.)

- A. Close a session with a web server after a specific amount of time.
- B. Filter out information from a response to an API call
- C. Change the response format or content type of an API call.
- D. Inform a previously defined chat channel after a deployment fate.
- E. Send an email to a customer of an online store after payment is complete

**Answer:** DE

**NEW QUESTION 70**

- (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 71**

- (Exam Topic 2)

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

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

**Answer:** D

**Explanation:**

Reference:

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

**NEW QUESTION 73**

- (Exam Topic 2)

Refer to the exhibit.

```
Code:
import requests

url = 'https://en.wikipedia.org/api/rest_v1/page/title/Cisco_Systems'
s = requests.Session()

def get_json(session=None, url="https://example.com"):
    try:
        if not session or type(session) is not requests.sessions.Session:
            raise Exception("Invalid session type")

        r = session.get(url)

        if r.status_code < 200 or r.status_code > 307:
            raise Exception("Status Code not within 2xx and 3xx")

        return r.json()

    except requests.exceptions.RequestException as e:
        raise e("Request failed")
    finally:
        session.close()

if __name__ == "__main__":
    items = get_json(session=s, url=url)
    [ ]

payload:
{'items': [{'title': 'Cisco Systems', 'page_id': 51746, 'rev': 930604297,
'tid': '58b40b30-20e7-11ea-a7a9-f1850c7cfe85', 'namespace': 0, 'user_id':
19450869, 'user_text': 'Dhruvh', 'timestamp': '2019-12-13T16:47:52Z', 'comment': '/* 1984-1995: Origins
and initial growth */', 'tags': [], 'restrictions': [], 'page_language':
'en', 'redirect': False}]}
```

Which command needs to be placed on the box where the code is missing to output the value of page\_id in the Python 3.7 script?

A)

```
print(items['items']['page_id'])
```

B)

```
print(items.get('items').get('page_id'))
```

C)

```
print(items.get('items')[0].get('page_id'))
```

D)

```
print(items['items']['page_id'].keys())
```

A. Option A

B. Option B

C. Option C

D. Option D

**Answer: C**

## NEW QUESTION 78

- (Exam Topic 2)

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

Request URL: <http://www.example.com/>

: GET

: 200 OK

Remote Address: [2606:2800:220:1:248:1893:25c8:1946]:80

Referrer Policy: strict-origin-when-cross-origin

Response Headersview source

Accept-Ranges: bytes

Age: 396561

Cache-Control: max-age=604800

: gzip

Content-Length: 648

: text/html; charset=UTF-8

Date: Sat, 20 Nov 2020 20:49:34 GMT

Etag: "3147526947+ident"

Expires: Sat, 21 Nov 2020 20:49:34 GMT

Last-Modified: Thu, 17 Oct 2019 07:18:26 GMT

Server: ECS (dna/63AA)

Vary: Accept-Encoding

X-Cache: HIT

Request Headersview source

Accept: text/html,application/xhtml+xml,application/xml;q=0.9,  
image/avif,image/webp,image/apng,\*/\*;q=0.8,application/signed-exchange;v=b3;q=0.9

Accept-Encoding: gzip, deflate

Accept-Language: en-US,en;q=0.9

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

- A. Mastered  
B. Not Mastered

**Answer:** A

**Explanation:**

Graphical user interface, text, application Description automatically generated

**NEW QUESTION 79**

- (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 83**

- (Exam Topic 2)

Refer to the exhibit.

Returns the wireless lan controller info with given device ID:

```
{
  "response": {
    "adminEnabledPorts": [ 0 ],
    "apGroupName": "string",
    "deviceId": "string",
    "ethMacAddress": "string",
    "flexGroupName": "string",
    "id": "string",
    "instanceTenantId": "string",
    "instanceUuid": "string",
    "lagModeEnabled": true,
    "netconfEnabled": true,
    "wirelessLicenseInfo": "ADVANTAGE",
    "wirelessPackageInstalled": true
  },
  "version": "string"
}
```

Drag and drop the code from the bottom onto the blanks in the code to construct a cURL command using the Cisco DNA Center API. which will provide the details of a WLAN controller with Id af397748444. Not at options are used.

#### Answer Area

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

network-device

id

wireless

wireless-info

controller

details

- A. Mastered
- B. Not Mastered

**Answer:** A

#### Explanation:

Diagram Description automatically generated

#### NEW QUESTION 85

- (Exam Topic 2)

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

- A. Collaboration
- B. Lean
- C. Sharing
- D. Measurement

**Answer:** B

#### Explanation:

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

#### NEW QUESTION 87

- (Exam Topic 2)

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

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

**Answer:** D

#### NEW QUESTION 89

- (Exam Topic 2)

Refer to the exhibit.

```
FROM nginx

ARG DELAY="30"
ENV INITIAL_DELAY=${DELAY}

ENTRYPOINT ["/bin/sh"]

CMD ["-c", "/bin/sleep ${INITIAL_DELAY} && nginx -g 'daemon off;']
```

Which command, including arguments, is executed when the container starts?

- A. /bin/sh -c "/bin/sleep 30 && nginx -g 'daemon off;'"
- B. /bin/sh -c "/bin/sleep 10 && nginx -g 'daemon off;'"
- C. /bin/bash -c "/bin/sleep 30 && nginx -g 'daemon off;'"
- D. /bin/sh -c "/bin/sleep 30" && nginx -g 'daemon off;'

**Answer:** A

#### NEW QUESTION 93

- (Exam Topic 2)

Why is refactoring done during test-driven development?

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

**Answer:** B

#### NEW QUESTION 95

- (Exam Topic 2)

An engineer must configure Cisco Nexus devices and wants to automate this workflow. The engineer enables the Cisco NX-OS REST API to configure the devices by using an Ansible playbook. Before running the code, which resource must be used to verify that the code works correctly?

- A. Cisco NX-OS SDK
- B. Cisco Learning Labs
- C. Cisco Code Exchange
- D. Cisco Modeling Labs

**Answer:** A

#### NEW QUESTION 97

- (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 102

- (Exam Topic 2)

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

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

**Answer:** A

#### Explanation:

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

#### NEW QUESTION 103

- (Exam Topic 2)

A developer is working on a feature for a new application. The changes in the existing branch named 'feat00304' must be integrated into a single commit with the

current working primary branch named 'prodapp411926287'. Which git command must be used?

- A. git rebase --merge feat00304
- B. git merge --squash feat00304
- C. git push --rebase feat00304
- D. git checkout --squash feat00304

**Answer: B**

#### NEW QUESTION 107

- (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 112

- (Exam Topic 2)

Refer to the exhibit.

```
1 #/bin/bash
2
3 curl https://ciscodevnet.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 115

- (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 120

- (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 121

- (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 126

- (Exam Topic 2)

Which implementation creates a group of devices on one or more LANs that are configured to communicate as if they were attached to the same wire?

- A. WLAN
- B. VLAN
- C. IPsec
- D. HSRP

**Answer:** B

#### NEW QUESTION 128

- (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 130

- (Exam Topic 2)

Refer to the exhibit.

```

--- README.md-repo  2019-10-06 21:15:59.000000000 +0100
+++ README.md       2019-10-06 21:07:35.000000000 +0100
@@ -88,8 +88,6 @@
    ``
-
-
-  ## Troubleshooting
-
-  ### CMake
@@ -162,4 +160,13 @@
-
-  ## References
-
-  +### Mosquitto
+
+  +* [github] (https://github.com/eclipse/mosquitto)
+  +* [homepage] (https://mosquitto.org)
+
+  +### MQTT
+
+  +* [organisation] (http://mgtt.org)
+

```

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

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

**Answer:** C

#### NEW QUESTION 133

- (Exam Topic 2)

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

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

**Answer:** C

#### Explanation:

Reference:

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

#### NEW QUESTION 135

- (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 139

- (Exam Topic 2)

What is a benefit of organizing into modules?

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

**Answer:** B

#### Explanation:

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

#### NEW QUESTION 140

- (Exam Topic 2)

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

- A. Finesse includes an RPC API that enables the development of custom gadgets.
- B. Agents access Finesse from a browser without needing to install or configure anything on the client machine.
- C. Finesse automatically collects telemetry data
- D. An OpenDNS utility is preconfigured and ready to use on Finesse.
- E. Gadget containers provide a seamless experience in a single user interface.

**Answer:** BE

#### NEW QUESTION 142

- (Exam Topic 2)

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

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

**Answer:** A

#### Explanation:

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

#### NEW QUESTION 146

- (Exam Topic 1)

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

```
import requests
url = "https://api.ciscospark.com/v1/memberships/Y2LzY29zcGFiYzov371508156INISVAvOTJhM2RkOWEiNjc1ZC00YTQxLThjNDEtMmFiZGY4OWY0NGY0QjExNzJkNmYwLTJlY2M1MTFhOS1iOWI3LWNmMjg3MTJhYTgzNw"

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

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

- A. Mastered  
B. Not Mastered

**Answer:** A

**Explanation:**

request, headers , payload

**NEW QUESTION 151**

- (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 154**

- (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. Delimeter 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 cild() API can be used when working with working with JSON and XML. What are two effect of running the script? (Choose two.)

- A. configure interlace loopback 5
- B. issue shutdown on interface loopback 5
- C. show only the interfaces In the up status
- D. show only the interfaces in admin shut status
- E. 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 156

- (Exam Topic 1)

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

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

**Answer:** BE

#### NEW QUESTION 157

- (Exam Topic 1)

Fill in the blanks to complete the statement.

Given a username of “devnet” And a password “Cisco123”, applications must create a base64 encoding of the string “\_\_\_\_\_” when sanding HTTP requests to an API that uses \_\_\_\_\_ authentication.

Given a username of “devnet” and a password of “cisco123”, applications must create a base64 encoding of the string “\_\_\_\_\_” when sending HTTP requests to an API that uses \_\_\_\_\_ authentication.

- A. Mastered
- B. Not Mastered

**Answer:** A

**Explanation:**

Solution as below

Given a username of “devnet” and a password of “cisco123”, applications must create a base64 encoding of the string “devnet:cisco123” when sending HTTP requests to an API that uses Basic authentication.

#### NEW QUESTION 158

- (Exam Topic 1)

What are two advantages of version control software? (Choose two.)

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

E. It allows new team members to access the current code and history.

**Answer:** DE

#### NEW QUESTION 162

- (Exam Topic 1)

Refer to the exhibit.

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

Bases: ucsm sdk.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?

```
#!/usr/bin/env python3
from ucsm sdk.ucshandle import UcsHandle
handle = UcsHandle("10.1.2.254", "admin", "password",
port="443", secure=True)
```

```
#!/usr/bin/env python3
import ucsm sdk.ucshandle.UcsHandle
handle = UcsHandle("10.1.2.254", "admin", "password",
port=443, secure=1)
```

```
#!/usr/bin/env python3
from ucsm sdk.ucshandle import UcsHandle
handle = UcsHandle(ip="10.1.2.254", username="admin",
password="password", port=443, secure=True)
```

```
#!/usr/bin/env python3
from ucsm sdk.ucshandle import UcsHandle
handle = UcsHandle("10.1.2.254", "admin", "password",
port="443", secure=1)
```

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

**Answer:** C

#### NEW QUESTION 165

- (Exam Topic 1)

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

The focus is on advanced planning and outcome prediction.

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

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

Developers respond to requirement changes throughout the development process.

Agile

Waterfall

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

The focus is on advanced planning and outcome prediction.

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

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

Developers respond to requirement changes throughout the development process.

Agile

The focus is on advanced planning and outcome prediction

Developers respond to requirement changes throughout the development process.

Waterfall

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

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

NEW QUESTION 170

- (Exam Topic 1)

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

Multi-Cloud automation and orchestration platform for Cisco and third-party servers, networks, storage, and converged infrastructure.

Software as a Service Platform that enables Cisco infrastructure management, automation and orchestration from anywhere.

Embedded software that enables Cisco server, fabric, and storage provisioning.

UCS Manager

UCS Director

Intersight

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Multi-Cloud automation and orchestration platform for Cisco and third-party servers, networks, storage, and converged infrastructure.

Embedded software that enables Cisco server, fabric, and storage provisioning.

Software as a Service Platform that enables Cisco infrastructure management, automation and orchestration from anywhere.

Multi-Cloud automation and orchestration platform for Cisco and third-party servers, networks, storage, and converged infrastructure.

Embedded software that enables Cisco server, fabric, and storage provisioning.

Software as a Service Platform that enables Cisco infrastructure management, automation and orchestration from anywhere.

#### NEW QUESTION 175

- (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 178

- (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 182

- (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 184

- (Exam Topic 1)

Refer to the exhibit.

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

What is represented in this YANG module?

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

Answer: A

NEW QUESTION 185

- (Exam Topic 1)

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

ports are different broadcast domain by default	Firewall
ports can be in the same broadcast domain	Load Balancer
uses traffic inspection to make routing decisions	Router
blocks networks traffic by default	Switch

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

1 – D, 2 – C, 3 – A, 4 – B  
Reference: <https://geek-university.com/ccna/broadcast-domain-explained/>

NEW QUESTION 186

- (Exam Topic 1)

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

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

- C. Switch between branches
- D. Create, list, rename, and delete branches

**Answer:** A

**Explanation:**

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

**NEW QUESTION 191**

- (Exam Topic 1)

In which situation would an edge computing solution be used?

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

**Answer:** A

**NEW QUESTION 196**

- (Exam Topic 1)

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

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

**Answer:** CD

**NEW QUESTION 198**

- (Exam Topic 1)

When using the Bash shell, how is the output of the devnet command saved to a file named "output.txt"?

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

**Answer:** B

**Explanation:**

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

**NEW QUESTION 203**

- (Exam Topic 1)

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

```
import requests
url = "https://myDNAserver/dna/intent/api/v1/network-device"
payload = {}
headers = {'x-auth-token': 'eyJ0eXAiOiJKV1QiLCJhbGciOiJIUzI1NiJ9.eyJzdWIiOiI1ZDE0OWZkMjhlZTY2MmMzMGM5YzE5ZTIiLCJmYyZlMCIsImV4cCI6MTU3MjM3ODE5MCwidXNlcm5hbWUiOiJraXN371274739.zhK5LPQd501ZUpZI0IH_qrgOXtllNbxSFFF7JOEtRis'}
}
response = requests.request( [redacted] , url,
headers = [redacted] , data = [redacted] )
print(response.text.encode("utf8"))
```

- A. Mastered
- B. Not Mastered

**Answer:** A

**Explanation:**

Solution as below.

```
import requests
url = "https://myDNAServer/dna/intent/api/v1/network-device"
payload = {}
headers = {'x-auth-token': 'eyJ0eXAiOiJKV1QiLCJhbGciOiJIUzI1NiJ9.eyJzdWIiOiI1ZDE0OWZkMjhlZTY2MmQ3NGM5YzE5ZTIiLCJmYzMCIsImV4cCI6MTU3MjM3ODE5MCwidXNlcm5hbWUraXN371387657.zhK5LPQd501ZUpZi0IH_qrgOXttINbxSFFF7JOEtRIs'}
response = requests.request("GET", url, headers=headers, data=payload)
print(response.text.encode('utf8'))
```

**NEW QUESTION 208**

- (Exam Topic 1)

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

DELETE	Create
GET	Read
PATCH	Update
POST	Update
PUT	Delete

- A. Mastered  
B. Not Mastered

**Answer:** A

**Explanation:**

1 – D, 2 – B, 3 – C, 4 – E, 5 – A

Reference:

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

Answer : Post  
Get Put Delete

**NEW QUESTION 212**

- (Exam Topic 1)

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

- A. easier to patch because Docker containers include only dependencies that the application requires  
B. prevents information leakage that can occur when unhandled exceptions are returned in HTTP responses  
C. allows for separation of application that traditionally run in the same host  
D. natively secures access to secrets that are used by the running application  
E. guarantees container images are secured and free of vulnerabilities

**Answer:** AC

**NEW QUESTION 214**

- (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 216**

- (Exam Topic 1)

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

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

**Answer:** A

#### NEW QUESTION 219

- (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 221

- (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 226

- (Exam Topic 1)

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

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

**Answer:** AE

#### NEW QUESTION 231

- (Exam Topic 1)

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

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

**Answer:** D

#### NEW QUESTION 232

- (Exam Topic 1)

Refer to the exhibit.

```
#!/bin/bash
read ndir
while [ -d "$ndir" ]
do
cd $ndir
done
mkdir $ndir
```

What is the action of the Bash script that is shown?

- A. The script waits until input is entere
- B. If the directory exists, the script goes into it until there is no directory with the same name, then it creates a new directory.
- C. The script goes into the directory called "\$ndir" and makes a new directory called "\$ndir"
- D. The script waits unit input is entered, then it goes into the directory entered and creates a new directory with the same name.
- E. For all directories in the current folde
- F. The script goes into directory and makes a new directory.

**Answer:** A

#### NEW QUESTION 235

- (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

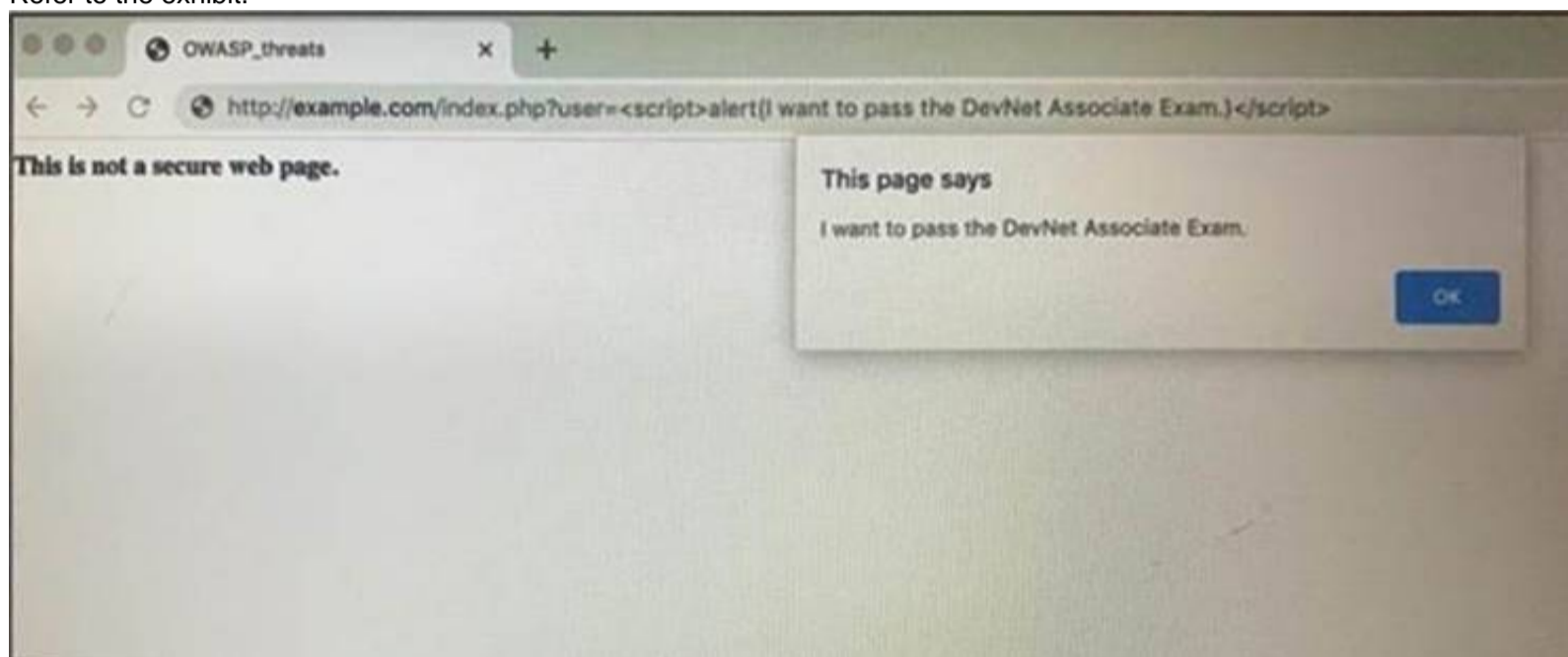
#### Explanation:

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

#### NEW QUESTION 240

- (Exam Topic 1)

Refer to the exhibit.



Which 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 244

- (Exam Topic 1)

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

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

**Answer:** AD

#### NEW QUESTION 245

- (Exam Topic 1)

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

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

**Answer:** CE

#### NEW QUESTION 248

- (Exam Topic 1)

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

- A. configure a device with native and OpenConfig-based models

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

**Answer:** A

**Explanation:**

Reference:

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

**NEW QUESTION 251**

- (Exam Topic 1)

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

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

**Answer:** BE

**NEW QUESTION 253**

- (Exam Topic 1)

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

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

**Answer:** BC

**Explanation:**

Reference:

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

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

**NEW QUESTION 255**

- (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 256**

- (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 261

- (Exam Topic 1)

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

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

Answer: AD

#### Explanation:

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

#### NEW QUESTION 266

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

#### NEW QUESTION 268

- (Exam Topic 1)

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

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

Answer: A

#### NEW QUESTION 269

- (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 273

- (Exam Topic 1)

Drag and drop the requests from the left into the correct order on the right to create and check the path trace between two devices using Cisco DNA center API.

GET /api/v1/flow-analysis/{flowAnalysisId}	Step 1
POST /api/v1/flow-analysis	Step 2
POST /api/system/v1/auth/token	Step 3
GET /api/v1/network-device/ and choose IP of source and destination devices	Step 4

- A. Mastered  
B. Not Mastered

**Answer:** A

**Explanation:**

1 – C, 2 – D, 3 – B, 4 - A

#### NEW QUESTION 276

- (Exam Topic 1)

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

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

**Answer:** DE

#### NEW QUESTION 280

- (Exam Topic 1)

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

SSH	<div>gRPC</div> <div></div>
HTTP	
HTTP/2	<div>NETCONF</div> <div></div>
HTTPS	<div>RESTCONF</div> <div></div> <div></div>

- 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 288**

- (Exam Topic 1)

What is the purpose of a firewall in application deployment?

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

**Answer:** D

**NEW QUESTION 293**

- (Exam Topic 1)

Which two protocols are used to apply a configuration change on a Cisco IOS XE device? (Choose two)

- A. CCX
- B. RESTCONF
- C. NETCONF
- D. HSRP
- E. CDP

**Answer:** BC

**NEW QUESTION 294**

- (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 297

- (Exam Topic 1)

Which product provides network controller-level management features?

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

**Answer:** A

**Explanation:**

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

### NEW QUESTION 301

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

### NEW QUESTION 304

- (Exam Topic 1)

Refer to the exhibit.

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

Which JSON is equivalent to the XML –encoded data?

- A. 

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

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

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

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

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

**Answer: A**

### NEW QUESTION 307

- (Exam Topic 1)

Which platform is run directly using a hypervisor?

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

**Answer:** C

### NEW QUESTION 308

- (Exam Topic 1)

Drag and drop the Docker file instructions from the onto correct descriptions on the right. Not all options are used.

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

- A. Mastered
- B. Not Mastered

**Answer:** A

**Explanation:**

1 – E, 2 – B, 3 – D, 4 – A

### NEW QUESTION 313

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

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

### NEW QUESTION 317

- (Exam Topic 1)

Which detail is included in a routing table?

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

**Answer:** D

**Explanation:**

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

### NEW QUESTION 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': '371274739' }
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)

Which platform is run directly using a hypervisor?

- A. Virtual
- B. Bare metal systems
- C. Containers
- D. Applications

**Answer: C**

#### NEW QUESTION 328

- (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 331

- (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 336

- (Exam Topic 1)

What is the purpose of the Cisco VIRT 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 339**

- (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 341**

- (Exam Topic 1)

Refer to the exhibit.

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

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

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

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

**Answer:** D

**Explanation:**

Reference:

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

**NEW QUESTION 346**

- (Exam Topic 1)

How is a branch called "my-bug-fix" started to develop a fix needed in a product?

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

**Answer:** B

**NEW QUESTION 349**

- (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 350

- (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 354

- (Exam Topic 1)

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

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

**Answer:** AB

#### NEW QUESTION 359

- (Exam Topic 3)

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

```
import requests
from requests.auth import HTTPBasicAuth

BASE_URL = 'https://sandboxdnac2.cisco.com'
AUTH_URL = '/dna/system/api/v1/'
USERNAME = 'admin'
PASSWORD = 'qwer1234!'

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

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

- A. Mastered
- B. Not Mastered

**Answer:** A

**Explanation:**

```
import requests
from requests.auth import HTTPBasicAuth

BASE_URL = 'https://sandboxdnac2.cisco.com'
AUTH_URL = '/dna/system/api/v1/' + '/auth/token'
USERNAME = 'admin'
PASSWORD = 'qwer1234!'

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

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

#### NEW QUESTION 361

- (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 364

- (Exam Topic 3)

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

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

**Answer:** B

#### NEW QUESTION 367

- (Exam Topic 3)

What is a capability of Ansible playbooks?

- A. They execute scheduled tasks regularly.
- B. They define the state for a device configuration.
- C. They collect SNMP logs from networking devices.
- D. They utilize the target device agent to execute.

**Answer:** A

#### NEW QUESTION 368

- (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 373

- (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?

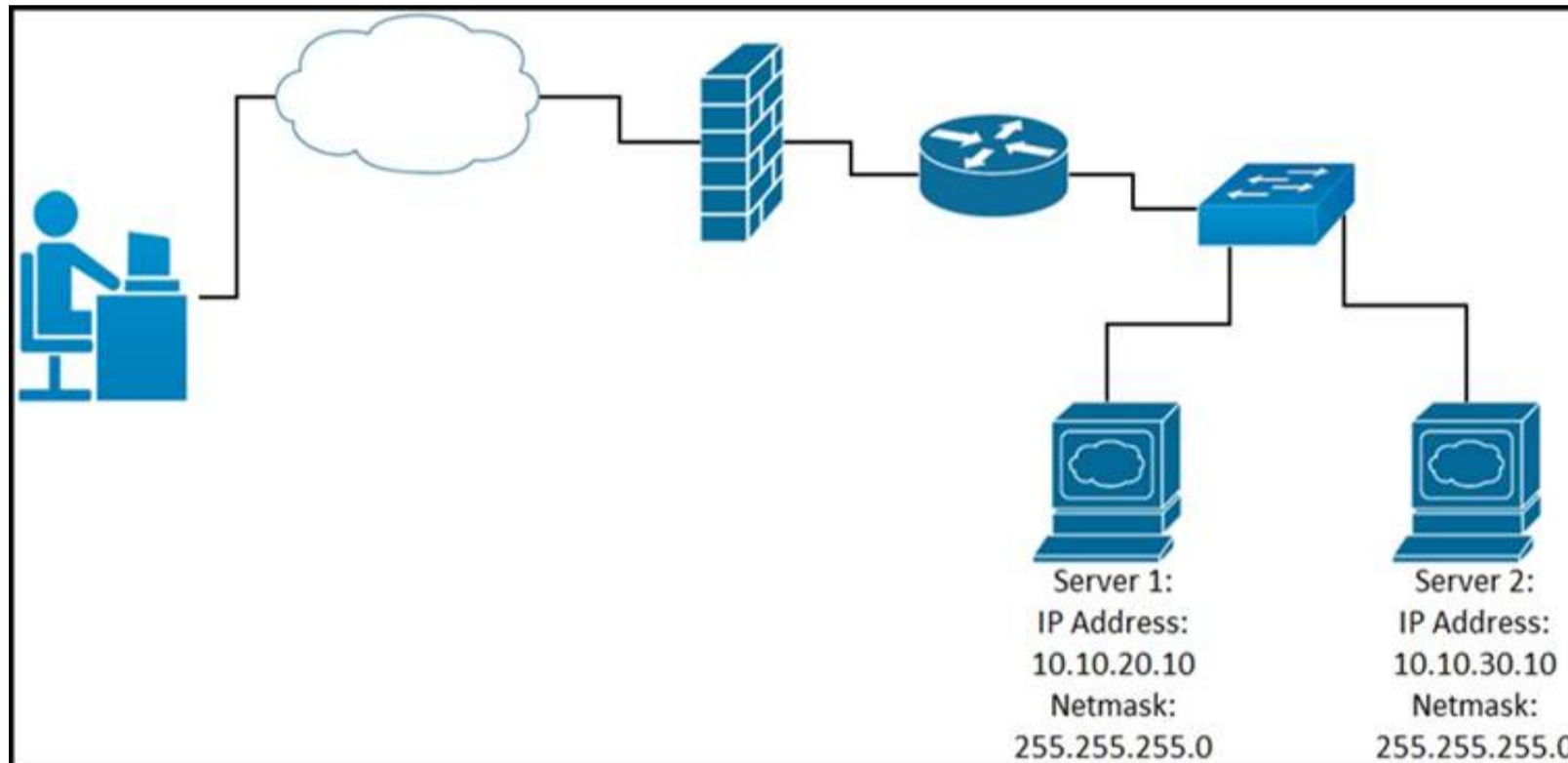
- A. Run the `git add .` command again in the correct subdirectory to ensure changes added to the staging area.
- B. Run the `git commit` command before the differences are compared to receive the end state of the code.
- C. Run the `git status` command to see the differences between current and previous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

Answer: D

#### NEW QUESTION 376

- (Exam Topic 3)

Refer to the exhibit.



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

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

Answer: D

#### NEW QUESTION 381

- (Exam Topic 3)

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

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

Answer: B

#### NEW QUESTION 384

- (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 388

- (Exam Topic 3)

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

exposes RESTCONF as Northbound API

uses REST as Northbound API

supported by standards such as YANG models

integrates to ITSM tools using Westbound APIs

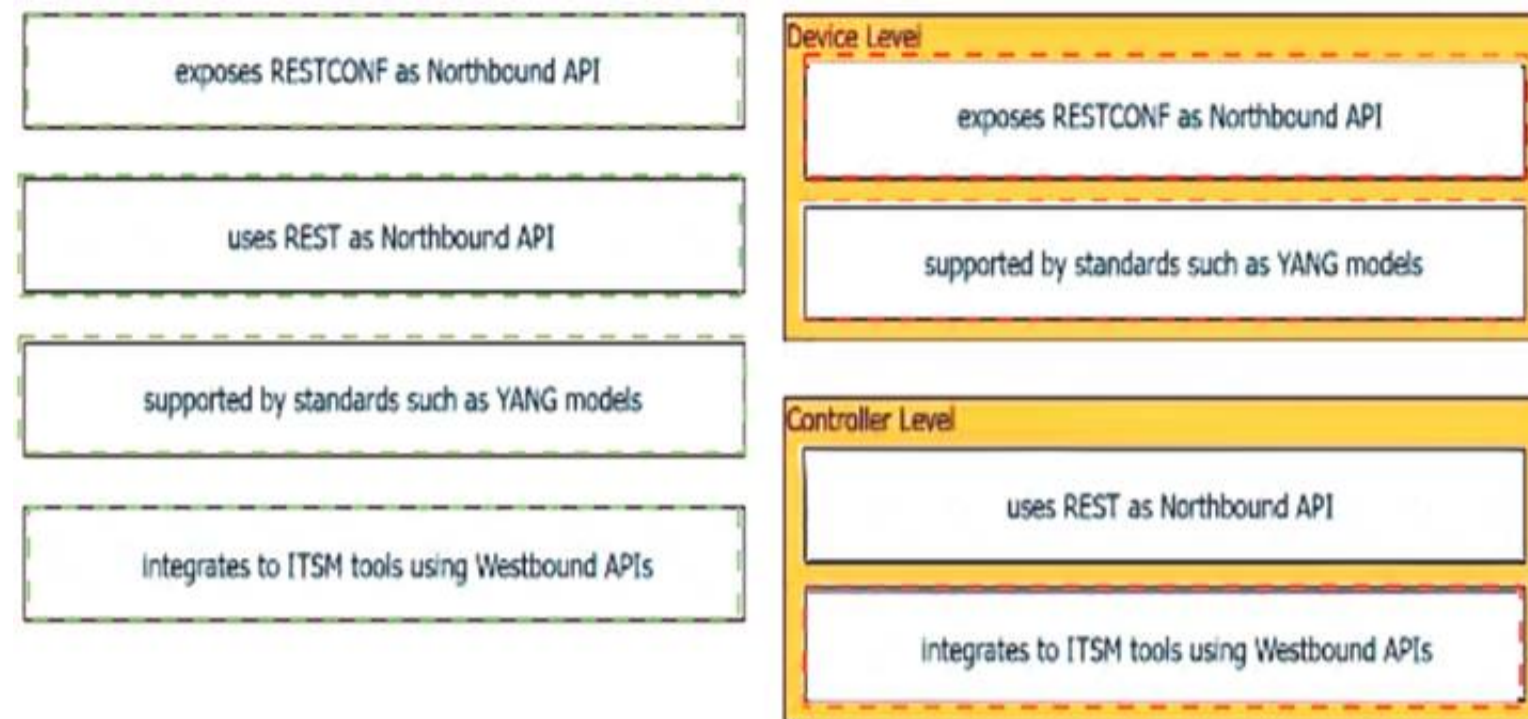
Device Level

Controller Level

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:



NEW QUESTION 392

- (Exam Topic 3)

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

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

Answer: C

NEW QUESTION 397

- (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_url}={if_name}',
                       headers=headers, json=payload,
                       auth=('cisco', 'secret'), verify=False)
    enable_function('Loopback1, true, ' ')
```

yang-data+json

application/xml

ietf-interfaces:interface

iana-if-type:softwareLoopback

base\_url

run\_function

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_url}={if_name}',
                       headers=headers, json=payload,
                       auth=('cisco', 'secret'), verify=False)

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

yang-data+json

application/xml

ietf-interfaces:interface

iana-if-type:softwareLoopback

base\_url

run\_function

iana-if-type:ethernetCsmacd

#### NEW QUESTION 402

- (Exam Topic 3)

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

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

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

**Answer: B**

#### NEW QUESTION 405

- (Exam Topic 3)

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

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

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

**Answer: B**

#### NEW QUESTION 409

- (Exam Topic 3)

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

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

**Answer:** A

#### Explanation:

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

#### NEW QUESTION 411

- (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 415

- (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)

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

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

A. 

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

B.

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

C.

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

D.

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

**Answer:** D

#### NEW QUESTION 422

- (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 425

- (Exam Topic 3)

Drag and drop the characteristics from the left onto the corresponding categories on the right to compare RESTful and RPC APIs.

Answer Area

stateless	RESTful
session-based	
must use HTTP	RPC
sometimes uses HTTP	

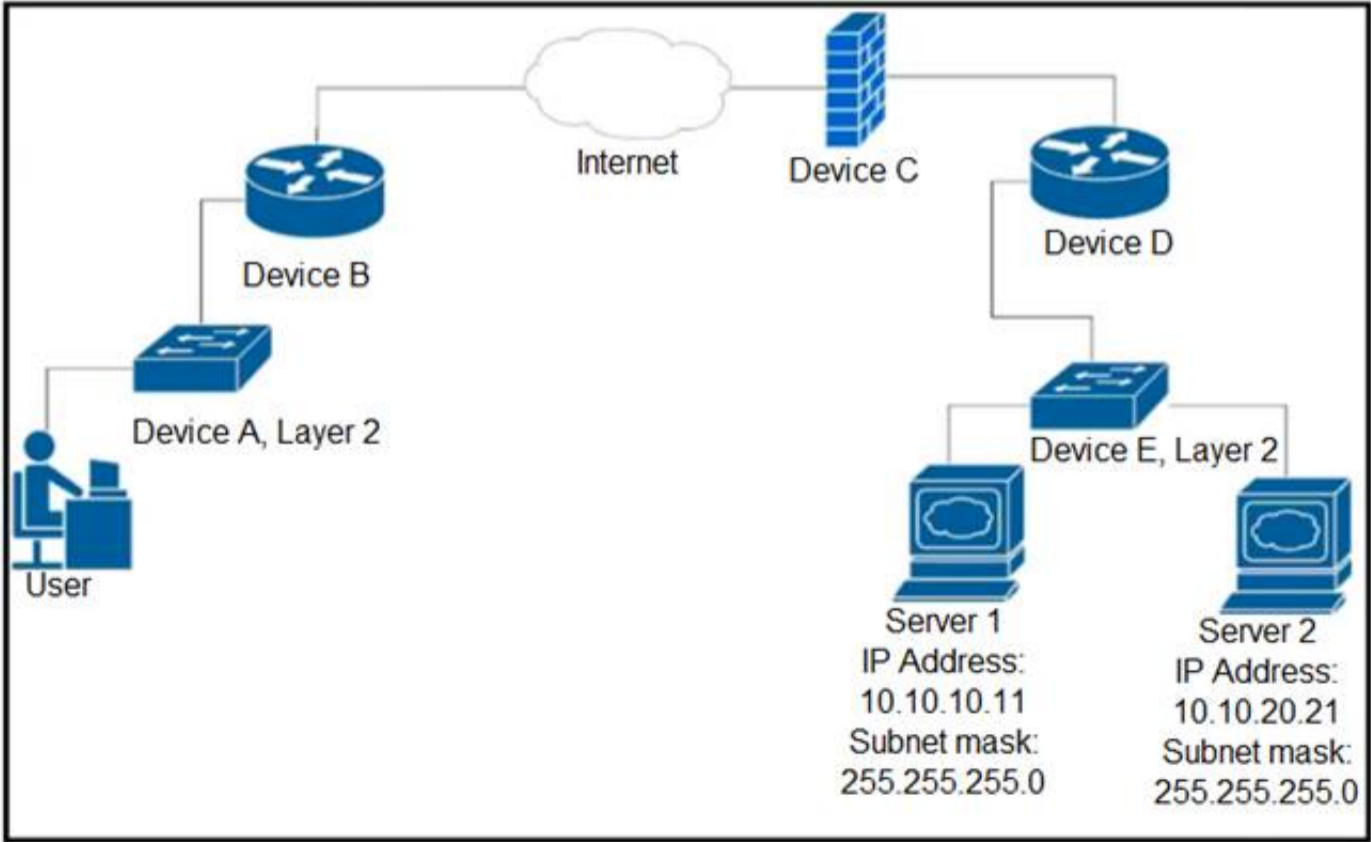
- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

stateless	RESTful
session-based	
must use HTTP	RPC
sometimes uses HTTP	

NEW QUESTION 430  
- (Exam Topic 3)  
Refer to the exhibit.



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

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

Answer: C

NEW QUESTION 432

- (Exam Topic 3)

Drag and drop the code snippets from the bottom onto the blanks in the code to complete the happy path scenario. Not all options are used.

```
import member as m
import pytest
class Team:
    def __init__(self, name):
        self.name = name
        self.members = []
    def add_member(self, member):
        if member:
            if member not in self.members:
                [ ]
                return True
            else:
                [ ]
        else:
            [ ]

@pytest.fixture
def team():
    team = Team('Reds')
    yield team
    del team

@pytest.fixture
def member():
    member = m.Member('Chris George')
    yield member
    del member

@pytest.mark.usefixtures('team', 'member')
class TestHappyPathAddMemberToTeam:
    def test_add_member_to_team(self, team, member):
        assert [ ] is True
```

- return True
- team.add\_member(member)
- self.members.append(member)
- yield member
- return False
- member.add\_member()

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

```
import member as m
import pytest
class Team:
    def __init__(self, name):
        self.name = name
        self.members = []
    def add_member(self, member):
        if member:
            if member not in self.members:
                member.add_member()
                return True
            else:
                return False
        else:
            team.add_member(member)

@pytest.fixture
def team():
    team = Team('Reds')
    yield team
    del team

@pytest.fixture
def member():
    member = m.Member('Chris George')
    yield member
    del member

@pytest.mark.usefixtures('team', 'member')
class TestHappyPathAddMemberToTeam:
    def test_add_member_to_team(self, team, member):
        assert yield member is True
```

- return True
- team.add\_member(member)
- self.members.append(member)
- yield member
- return False
- member.add\_member()

NEW QUESTION 433

- (Exam Topic 3)

```
1 URL: https://example.com/restconf/data/Cisco-IOS-XE-native:native/logging/monitor
2 Method: POST
3
4 Headers: {'Content-type': 'application/yang-data+json', 'Accept': 'application/yang-data+json,
* application/yang-data.errors+json'}
5
6 Body:
7
8 {
9   "severity": "alerts"
10 }
```

Refer to the exhibit. Which HTTP code is returned after the RESTCONF query is executed?

- A. 201
- B. 204
- C. 302
- D. 304

**Answer:** A

#### NEW QUESTION 436

- (Exam Topic 3)

Refer to the exhibit.

#### HTTP Request

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

#### HTTP Response

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

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

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

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

**Answer:** A

#### Explanation:

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

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

#### NEW QUESTION 440

- (Exam Topic 3)

Refer to the exhibit.

```
import requests

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

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

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

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

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

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

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

**Answer:** A

#### NEW QUESTION 443

- (Exam Topic 3)

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 446

- (Exam Topic 3)

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

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

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

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

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

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

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

**Answer: D**

#### NEW QUESTION 450

- (Exam Topic 3)

Which port does HTTPS use by default?

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

**Answer: B**

#### NEW QUESTION 452

- (Exam Topic 3)

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

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

**Answer: B**

#### NEW QUESTION 457

- (Exam Topic 3)

## Object Lookup

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

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

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

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

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

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

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

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

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

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

aci = cobra.mit.access.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+=1
```

fvBD

fvTenant

ClassQuery

bdname

DnQuery

ClassName

commit

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

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

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

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

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

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

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

fvBD

fvTenant

ClassQuery

bdname

DnQuery

ClassName

commit

#### NEW QUESTION 458

- (Exam Topic 3)

What is a benefit of a distributed version control system?

- A. encourages users to commit small places of work to the system more frequently
- B. ensures that all code meets minimum standards before being committed to the system
- C. allows users to work on the codebase even when not connected to the Internet
- D. ensures that all code is tested before being committed to the system

**Answer: C**

#### Explanation:

Reference: <https://about.gitlab.com/topics/version-control/benefits-distributed-version-control-system/>

#### NEW QUESTION 459

- (Exam Topic 3)

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

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

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

**Answer: AC**

#### NEW QUESTION 464

- (Exam Topic 2)

Which configuration management tool has an agentless capability?

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

**Answer: C**

#### NEW QUESTION 469

- (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 470

- (Exam Topic 2)

Refer to the exhibit.

```
API Documentation:

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

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

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

A)

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

B)

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

C)

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

D)

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

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

**Answer:** C

#### NEW QUESTION 474

- (Exam Topic 2)

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

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

**Answer:** A

#### NEW QUESTION 478

- (Exam Topic 2)

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

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

**Answer:** D

#### NEW QUESTION 483

- (Exam Topic 3)

Developer is working on a new feature and made changes on a branch named 'branch-413667549a-new'. When merging the branch to production, conflicts occurred. Which Git command must the developer use to recreate the pre-merge state?

- A. git merge -no-edit
- B. git merge -commit
- C. git merge -revert
- D. git merge -abort

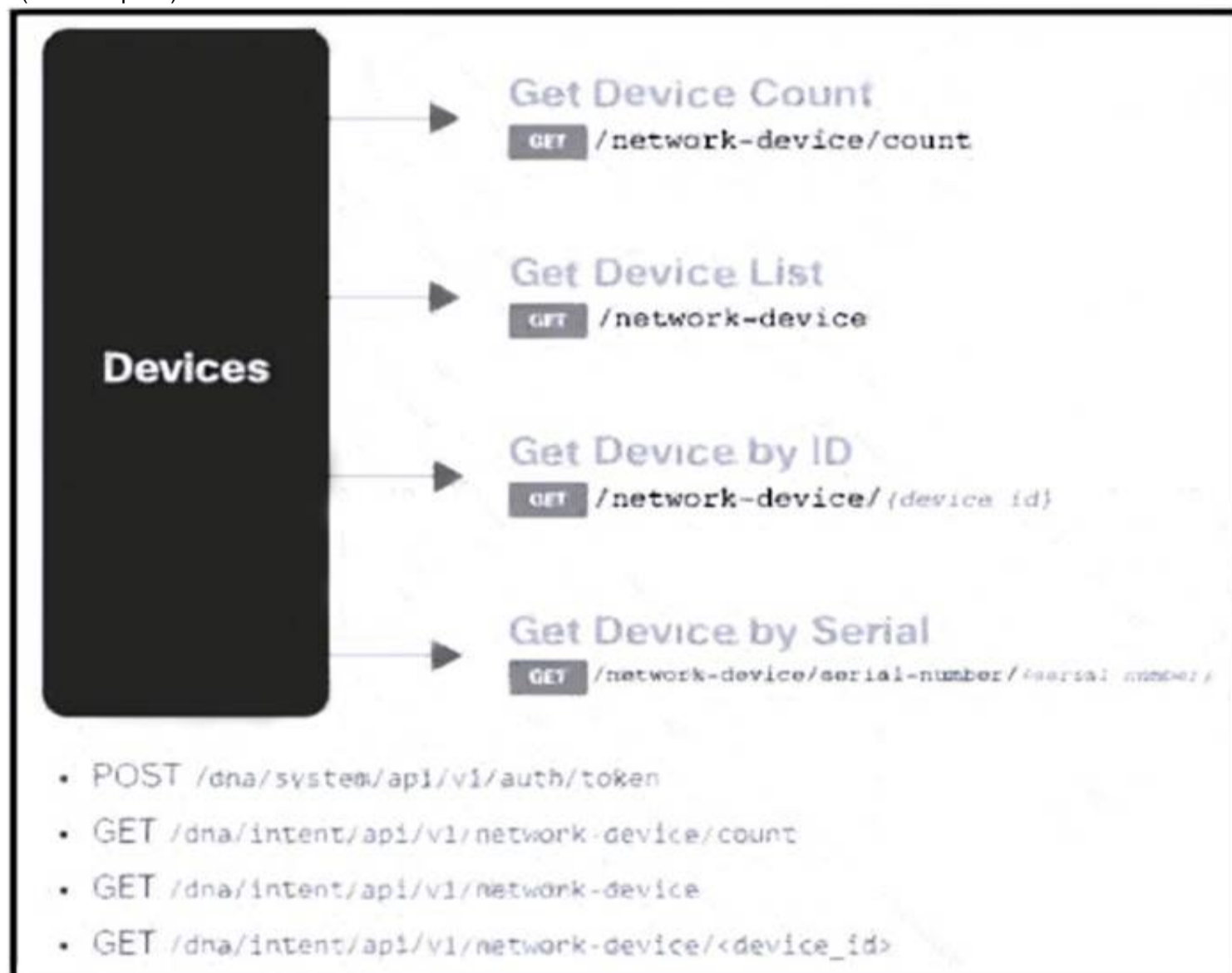
**Answer:** D

#### Explanation:

<https://www.git-tower.com/learn/git/ebook/en/command-line/advanced-topics/merge-conflicts>

#### NEW QUESTION 484

- (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 488

- (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 493

- (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 495

- (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 498

- (Exam Topic 3)

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

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

**Answer:** D

#### NEW QUESTION 501

- (Exam Topic 3)

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

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

**Answer:** CD

#### NEW QUESTION 505

- (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 511

- (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 513

- (Exam Topic 3)

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

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

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

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

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

NEW QUESTION 518

- (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 521

- (Exam Topic 3)

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

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

**Answer:** B

#### NEW QUESTION 526

- (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 529

- (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 530

- (Exam Topic 3)

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

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

**Answer:** A

#### NEW QUESTION 535

- (Exam Topic 3)

Which two situations align with infrastructure as code principles? (Choose two.)

- A. nonreplicable snowflake servers
- B. release versions to specific hardware
- C. maximized configuration drift
- D. easily reproducible systems
- E. repeatable processes

**Answer:** BD

#### NEW QUESTION 537

- (Exam Topic 3)

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

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

Which requirement prevents the use of RESTCONF for the solution?

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

**Answer:** C

#### NEW QUESTION 540

- (Exam Topic 3)

Which standard supported by Cisco IOS XE and Cisco NX-OS is used for automating the configuration of multiple devices across a network?

- A. SNMP – YANG
- B. SYSLOG – YANG
- C. CLI – YANG
- D. NETCONF – YANG

**Answer:** D

#### NEW QUESTION 543

- (Exam Topic 3)

A developer plans to deploy a new application that will use an API to implement automated data collection from Webex with these requirements:

The application was created by using the request library. Requires HTTP basic authentication.

Provides data in JSON or XML formats.

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

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

**Answer:** B

#### NEW QUESTION 547

- (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 549

- (Exam Topic 3)

What is a feature of XML compared to other data formats?

- A. It uses tags to define the structure.
- B. It uses parenthesis for key-value pairs.
- C. It uses indentation to define the structure.
- D. It uses namespaces for list representation.

**Answer:** A

#### NEW QUESTION 553

- (Exam Topic 3)

An engineer must configure Cisco Nexus devices and wants to automate this workflow. The engineer will use an Ansible playbook to configure devices through Cisco NX REST API. Before the code is run, which resource must be used to verify that the REST API requests work as expected?

- A. Cisco Open NX-OS

- B. Cisco NX-OS SDK
- C. Cisco Learning Labs
- D. Cisco Code Exchange for Nexus

**Answer:** C

#### NEW QUESTION 554

- (Exam Topic 3)

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

- A. connected user tracking
- B. infrastructure resource optimization
- C. multiple device control protocols
- D. device performance monitoring

**Answer:** C

#### NEW QUESTION 556

- (Exam Topic 3)

Which OWASP threat occurs when untrusted data is supplied as input to an interpreter as part of a command or query?

- A. broken authentication
- B. data exposure
- C. injection
- D. cross-site scripting

**Answer:** C

#### NEW QUESTION 560

- (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 561

- (Exam Topic 3)

An engineer needs to retrieve a list of locally available Firepower Threat Defense upgrade packages by using the Firepower Management Center REST API. The engineer uses a GET request with the URL:

/api/fmc\_platform/v1/updates/upgradepackages/f413afeb-e6f6-75f4-9169-6d9bd49s625e

What does “f413afeb-e6f6-75f4-9169-6d9bd49s625e” represent?

- A. container UUID
- B. package UUID
- C. domain UUID
- D. object UUID

**Answer:** B

#### Explanation:

"GET upgradepackages Request Type: GET

Description: Retrieves a list of locally available Firepower Threat Defense upgrade packages, including major upgrades, maintenances release upgrades, and hotfixes.

URL: /api/fmc\_platform/v1/updates/upgradepackages

URL for GET by ID: /api/fmc\_platform/v1/updates/upgradepackages/{package\_UUID}" Source:

[https://www.cisco.com/c/en/us/td/docs/security/firepower/640/api/REST/Firepower\\_Management\\_Center\\_RES](https://www.cisco.com/c/en/us/td/docs/security/firepower/640/api/REST/Firepower_Management_Center_RES)

#### NEW QUESTION 566

- (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 571

- (Exam Topic 3)

Which protocol runs over TCP port 830?

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

**Answer:** A

#### NEW QUESTION 575

- (Exam Topic 3)

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

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

**Answer:** B

#### NEW QUESTION 576

- (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 580

- (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 2> 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 585

- (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 588

.....

## Relate Links

**100% Pass Your 200-901 Exam with ExamBible Prep Materials**

<https://www.exambible.com/200-901-exam/>

## Contact us

We are proud of our high-quality customer service, which serves you around the clock 24/7.

Viste - <https://www.exambible.com/>