

Cisco.Pre.300-435.VCEup.82q - DEMO

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Passing Score: 800
Time Limit: 120 min



Exam Code: 300-435

Exam Name: Automating Cisco Enterprise Solutions (ENAUTO)

Certification Provider: Cisco

Corresponding Certifications: Cisco

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

Sections

1. Network Programmability Foundation
2. Automate APIs and Protocols
3. Network Device Programmability
4. Cisco DNA Center
5. Cisco SD-WAN
6. Cisco Meraki



Exam A**QUESTION 1**

What are two characteristics of RPC API calls? (Choose two.)

- A. They can be used only on network devices.
- B. They use only UDP for communications.
- C. Parameters can be passed to the calls.
- D. They must use SSL/TLS.
- E. They call a single function or service.

Correct Answer: AC

Section: Network Programmability Foundation

Explanation

Explanation/Reference:

Section: Network Programmability Foundation

Reference: <https://pubs.opengroup.org/onlinepubs/9629399/chap6.htm>

QUESTION 2

Which two actions do Python virtual environments allow users to perform? (Choose two.)

- A. Simplify the CI/CD pipeline when checking a project into a version control system, such as Git.
- B. Efficiently port code between different languages, such as JavaScript and Python.
- C. Run and simulate other operating systems within a development environment.
- D. Quickly create any Python environment for testing and debugging purposes.
- E. Quickly create an isolated Python environment with module dependencies.

Correct Answer: DE

Section: Network Programmability Foundation

Explanation

Explanation/Reference:

Section: Network Programmability Foundation

Reference: <https://realpython.com/python-virtual-environments-a-primer/>

QUESTION 3

What are two benefits of leveraging Ansible for automation of Cisco IOS XE Software? (Choose two.)

- A. Ansible playbooks are packaged and installed on IOS XE devices for automatic execution when an IOS device reboots.
- B. All IOS XE operating systems include Ansible playbooks for basic system administration tasks.
- C. It is a device-independent method for automation and can be used with any type of device or operating system.
- D. Ansible playbooks can be written from the IOS XE EXEC command line to configure the device itself.
- E. It does not require any modules of software except SSH to be loaded on the network device.

Correct Answer: AC

Section: Network Programmability Foundation

Explanation

Explanation/Reference:

Section: Network Programmability Foundation

Reference: <https://developer.cisco.com/learning/modules/intro-ansible-iosxe/ansible-overview/step/4>

QUESTION 4

```

return_val=
{
  "alertId": "643451796765672516",
  "alertType": "appliances went down",
  "deviceMac": "e0:55:3d:6c:c1:7a",
  "deviceName": "MX65 c1:7a",
  "deviceSerial": "Q2QN-58EA-XXXX",
  "deviceUrl": "https://n143.meraki.com/Branch-1/n/.../manage/nodes/new_wired_status",
  "networkId": "L_1234567890",
  "networkName": "Branch 1",
  "networkUrl": "https://n143.meraki.com/Branch-1/n/.../manage/nodes/wired_status",
  "occuredAt": "2018-11-10T18:45:20.000000Z",
  "organizationId": "1234567",
  "organizationName": "Meraki Demo",
  "organizationUrl": "https://n143.meraki.com/o/.../manage/organization/overview",
  "sentAt": "2018-11-10T18:50:30.479982Z",
  "SharedSecret": "asdf1234",
  "version": "0.1"
}

```

Refer to the exhibit. The task is to create a Python script to display an alert message when a Meraki MX Security Appliance goes down. The exhibit shows sample data that is received. Which Python snippet displays the device name and the time at which the switch went down?

- A. with return_val:

```

print("The Switch: "+deviceName+ ", \
went down at: "+occurredAt)

```
- B. print("The Switch: "+return_val.deviceName+ ", \
went down at: "+return_val.occurredAt)
- C. print("The Switch: "+return_val['deviceName']+ ", \
went down at: "+return_val['occurredAt'])
- D. with items as return_val:

```

print("The Switch: "+items.deviceName+ ", \
went down at: "+items.occurredAt)

```

Correct Answer: B

Section: Network Programmability Foundation

Explanation

Explanation/Reference:

Section: Network Programmability Foundation

QUESTION 5

```
{
  "alertData": {
    "countNode": 1,
    "bssids": [
      "aa:bb:cc:dd:ee:ff",
      "11:22:33:44:55:66"
    ],
    "minFirstSeen": 1548512334,
    "maxLastSeen": 1548512802,
    "countIsContained": 0,
    "reason": "Seen on LAN",
    "wiredMac": "aa:bb:cc:dd:ee:f0"
  },
  "alertId": "629378047939282802",
  "alertType": "Air Marshal -Roque AP detected",
  "occuredAt": "2019-01-26T14:18:54.000000Z",
  "organizationId": "123456",
  "organizationName": "Organization",
  "organizationUrl": "https://nl.meraki.com/o/.../manage/organization/overview",
  "networkId": "L_123456789012345678",
  "networkName": "Network",
  "networkUrl": "https://nl.meraki.com/.../manage/nodes/list",
  "version": "0.1",
  "SharedSecret": "supersecret",
  "sentAt": "2019-01-26T14:35:20.442869Z",
}
```

Refer to the exhibit. The goal is to write a Python script to automatically send a message to an external messaging application when a rogue AP is detected on the network. The message should include the broadcast SSID that is in the alert. A function called "send_to_application" is created, and this is the declaration:

```
send_to_application(message)
```

The exhibit also shows the data that is received by the application and stored in the variable return_val. Which Python code completes the task?

- A.

```
bssids =return_val["bssids"]
for number in range(return_val["alertData"]["countNode"]):
    send_to_application ("ALERT: detected a bssid on the
    network: "+ return_val["alertData"][bssids][number])
```
- B.

```
bssids =return_val["bssids"]
for value in bssids:
    send_to_application ("ALERT: detected a bssid on the
    network: "+value)
```
- C.

```
count = retutn_val["alertData"]["countNode"]
bssids =return_val["alertData"][count]["bssids"]
for value in bssids:
    send_to_application ("ALERT: detected a bssid on the
    network: "+value)
```
- D.

```
bssids =return_val["alertData"]["bssids"]
for value in bssids:
    send_to_application ("ALERT: detected a bssid on the
    network: "+value)
```

Correct Answer: A

Section: Network Programmability Foundation

Explanation

Explanation/Reference:

Section: Network Programmability Foundation

For number in range value is required for the application to send the alert. Bssids are also included.

QUESTION 6

Which two features are foundations of a software-defined network instead of a traditional network? (Choose two.)

- A. control plane and data plane are tightly coupled
- B. build upon a robust software stack
- C. requires device by device-level configurations
- D. automated through expressed intent to a software controller
- E. requires significant physical hardware resources

Correct Answer: BD

Section: Network Programmability Foundation

Explanation

Explanation/Reference:

Section: Network Programmability Foundation

In traditional networks, control plane and data plane are coupled tightly. It also requires device by device configurations and of course, it uses physical hardware resources to function. Whereas, SDN is based on a software stack. In Cisco SDNs are automated through expressed intent to a software controller.

QUESTION 7

A new project called "device_status" must be stored in a central Git repository called "device_status" with the first file named "device_status.py". The Git repository is created using the account python_programmer. Which set of commands inserts the project into Git?

- A.

```
git init
git add device_status.py
git commit -m "Initial Revision"
git remote add origin \
    https://git.cisco.com/python_programmer/device_status.git
git push -u origin master
```
- B.

```
git init
git remote add origin \
    https://git.cisco.com/python_programmer/device_status.git
git add device_status.py
git pull
```
- C.

```
git init
git remote add origin \
    https://git.cisco.com/python_programmer/device_status.git
git add device_status.py
git commit -m "Initial Revision"
git pull -u origin master
```
- D.

```
git init
git add device_status.py
git remote add python_programmer/device_status
git push
```

Correct Answer: A

Section: Network Programmability Foundation

Explanation

Explanation/Reference:

Section: Network Programmability Foundation

Reference: <https://help.github.com/en/github/importing-your-projects-to-github/adding-an-existing-project-to-github-using-the-command-line>

QUESTION 8

What are two characteristics of synchronous calls to APIs? (Choose two.)

- A. They can be used only with certain programming languages.
- B. They make your application less portable, so asynchronous calls are preferred.
- C. They can add perceived latency to your application if data is not received.
- D. They block until a response is returned from the servers.
- E. They do not block while waiting for the API to be processed.

Correct Answer: CE

Section: Network Programmability Foundation

Explanation

Explanation/Reference:

Section: Network Programmability Foundation

Reference: <https://docs.cloudmgmt.cisco.com/display/40API/Synchronous+and+Asynchronous+APIs>

QUESTION 9

```
neighbors = ['s1', 's2', 's3']
switch = {'hostname': 'nexus', 'os': '7.0.3', 'neighbors': neighbors}
print(switch['neighbors'][1])
```

Refer to the exhibit. What is the result when running the Python scripts?

- A. s1
- B. s2
- C. s1, s2, s3
- D. s3

Correct Answer: B

Section: Network Programmability Foundation

Explanation

Explanation/Reference:

Explanation:

```

1 neighbors = ['s1', 's2', 's3']
2 switch = {'hostname': 'nexus', 'os': '7.0.3', 'neighbors': neighbors}
3 print(switch['neighbors'][1])

```

Execute Mode, Version, Inputs & Arguments

3.7.4

CommandLine Arguments

Result

CPU Time: 0.02 sec(s), Memory: 7604 kilobyte(s)

s2

QUESTION 10

An engineer stored source code in a Git repository and is ready to develop a new feature. The production release is stored in the "master" branch. Which commands create the new feature in a separate branch called "feature" and check out the new version?

- A. `git branch \`
`https://git.cisco.com/python_programmer/device_status:feature`
`git checkout device_status:feature`
- B. `git remote add branch python_programmer/device_status:feature`
`git pull`
- C. `git branch feature`
`git checkout feature`
- D. `git remote add branch \`
`https://git.cisco.com/python_programmer/device_status:feature`
`git push`

Correct Answer: C

Section: Network Programmability Foundation

Explanation

Explanation/Reference:

Section: Network Programmability Foundation

Reference: <https://www.atlassian.com/git/tutorials/comparing-workflows/feature-branch-workflow>

QUESTION 11

```
{
  "Cisco-IOS-XR-ifmgr-cfg:interface-configurations": {
    "interface-configuration": [
      {
        "active": "act",
        "interface-name": "Loopback0",
        "description": "PRIMARY ROUTER LOOPBACK"
      }
    ]
  }
}
```

Refer to the exhibit. Which type of YANG container is described by the JSON instance provided?

- A. interface-configurations
- B. active
- C. interface-name
- D. description

Correct Answer: A

Section: Automate APIs and Protocols

Explanation

Explanation/Reference:

Section: Automate APIs and Protocols

Reference: https://www.cisco.com/c/en/us/td/docs/routers/asr9000/software/asr9k-r7-0/programmability/configuration/guide/b-programmability-cg-asr9000-70x/b-programmability-cg-asr9000-70x_chapter_011.html

QUESTION 12

```
module: Cisco-IOS-XE-vlan-oper
+--ro vlans
  +--ro vlan* [id]
    +--ro id          uint16
    +--ro name?       string
    +--ro status?     vlan-iso-xe-oper:vlan-status-type
    +--ro ports* []
      | +--ro interface?  string
      | +--ro subinterface? uint32
    +--ro vlan-interfaces* [interface]
      +--ro interface    string
      +--ro subinterface  uint32
```

Refer to the exhibit. Which NETCONF protocol operation is used to interact with the YANG model?

- A. <edit-config>
- B. <get>
- C. <get-config>
- D. <copy-config>

Correct Answer: A

Section: Automate APIs and Protocols

Explanation

Explanation/Reference:

Section: Automate APIs and Protocols

Reference: <https://www.cisco.com/c/en/us/td/docs/routers/crs/software/crs-r6-4/programmability/configuration/guide/b-programmability-cg-crs-64x.pdf>

QUESTION 13

```

<rcp xmlns="urn:ietf:params:xml:ns:netconf:base:1.0" message-id="101">
  <get>
    <filter>
      <native xmlns="http://cisco.com/ns/yang/Cisco-IOS-XE-native">
        <ntp>
          <server xmlns="http://cisco.com/ns/yang/Cisco-IOS-XE-ntp">
            <server-list>
              <ip-address>10.11.10.65</ip-address>
            </server-list>
          <server>
        </ntp>
      </native>
      <ntp-oper-data xmlns="http://cisco.com/ns/yang/Cisco-IOS-XE-ntp-oper">
        <ntp-status-info>
          <ntp-associations>
            <peer-stratum/>
          </ntp-associations>
        </ntp-status-info>
      </ntp-oper-data>
    </filter>
  </get>
</rcp>

```

Refer to the exhibit. How many YANG models does the NETCONF **<get>** operation interact with?

- A. one
- B. two
- C. three
- D. four

Correct Answer: A

Section: Automate APIs and Protocols

Explanation

Explanation/Reference:

Section: Automate APIs and Protocols

The get operation tag is at the beginning of the document. It interacted only with NTP and its related services. There get operation interacted only with one model.

QUESTION 14

Which statement describe the difference between OpenConfig and native YANG data models?

- A. Native models are designed to be independent of the underlying platform and are developed by vendors and standards bodies, such as the IETF.
- B. Native models are developed by individual developers and designed to apply configurations on platforms.
- C. OpenConfig models are developed by vendors and designed to integrate to features or configurations that are relevant only to that platform.
- D. Native models are developed by vendors and designed to integrate to features or configurations that are relevant only to that platform.

Correct Answer: A

Section: Automate APIs and Protocols

Explanation

Explanation/Reference:

Section: Automate APIs and Protocols

Reference: <https://www.cisco.com/c/en/us/products/collateral/switches/nexus-9000-series-switches/white-paper-c11-741518.html>

QUESTION 15

```

import requests
import sys

requests.package.urllib3.disable_warnings()

HOST = '10.1.2.3'
PORT = 9443
USER = 'user'
PASS = 'password'

def main():
    url = "https://{h}:{p}/restconf/data/Cisco-IOS-XE-native:native/hostname".format(h=HOST, p=PORT)

    headers = {'Content-Type': 'application/ ',
               'Accept': 'application/ '}
    response = requests.get(url, auth=(USER, PASS),
                           headers=headers, verify=False)
    print(response.text)

if __name__ == '__main__':
    sys.exit(main())

```

Refer to the exhibit. An engineer creates a Python script using RESTCONF to display hostname information. The code must be completed so that it can be tested. Which string completes the highlighted areas in the exhibit?

- A. yang-data+json
- B. yang +json
- C. yang.data+json
- D. json

Correct Answer: A

Section: Automate APIs and Protocols

Explanation

Explanation/Reference:

Section: Automate APIs and Protocols

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

QUESTION 16

Which statement is true for Cisco IOS XE Software?

- A. RESTCONF supports JSON and XML and NETCONF supports XML.
- B. RESTCONF supports XML and NETCONF supports JSON and XML.
- C. RESTCONF and NETCONF supports JSON and XML.
- D. RESTCONF supports XML and NETCONF supports JSON.

Correct Answer: A

Section: Automate APIs and Protocols

Explanation

Explanation/Reference:

Section: Automate APIs and Protocols

Reference: https://www.cisco.com/c/en/us/td/docs/ios-xml/ios/prog/configuration/169/b_169_programmability_cg/restconf_programmable_interface.html

QUESTION 17

Which curl command is used to update the SNMP community of network ID "1234567" to read-only?

- A.
- ```
curl -L -H 'X-Cisco-Meraki-API-Key: <key>' \
-H 'Content-Type: application/json' \
-X PUT --data-binary '{ \
 "access": "users", \
 "communityString": "readonly"}' \
'https://api.meraki.com/api/v0/networks/1234567/snmpSettings'
```
- B.
- ```
curl -L -H 'X-Cisco-Meraki-API-Key: <key>' \
-H 'Content-Type: application/json' \
-X PUT --data-binary '{ \
  "access": "community", \
    "communityString": "readonly"}' \
'https://api.meraki.com/api/v0/networks/1234567/snmpSettings'
```
- C.
- ```
curl -L -H 'X-Cisco-Meraki-API-Key: <key>' \
-H 'Content-Type: application/json' \
-X PUT --data-binary '{ \
 "access": "users", \
 "username": "snmp", \
 "passphrase": "readonly"}' \
'https://api.meraki.com/api/v0/networks/1234567/snmpSettings'
```
- D.
- ```
curl -L -H 'X-Cisco-Meraki-API-Key: <key>' \
-H 'Content-Type: application/json' \
-X POST --data-binary '{ \
  "access": "community", \
    "communityString": "readonly"}' \
'https://api.meraki.com/api/v0/networks/1234567/snmpSettings'
```

Correct Answer: B

Section: Automate APIs and Protocols

Explanation

Explanation/Reference:

Section: Automate APIs and Protocols

PUT is used to update the snmp network ID. The access has to be community and not users. Therefore, option B is correct.

QUESTION 18

```
module: ietf-ip
augment /if:interfaces/if:interface:
+--rw ipv4!
| +--rw enabled?      boolean
| +--rw forwarding?  boolean
| +--rw mtu?          uint16
| +--rw address* [ip]
| | +--rw ip          inet:ipv4-address-no-zone
| | +--rw (subnet)
| | | +--:(prefix-length)
| | | | +--rw prefix-length?      uint8
| | | +--:{netmask}
| | | +--rw netmask?              yang:dotted-quad (ipv4-non-contiguous-netmasks)?
| | +--ro origin?                ip-address-origin
| +--rw neighbor* [ip]
| +--rw ip                  inet:ipv4-address-no-zone
| +--rw link-layer-address  yang:phys-address
```

Refer to the exhibit. Which NETCONF statement type is represented by **+--rw address* [ip]**?

- A. list
- B. leaf-list
- C. container
- D. submodule

Correct Answer: A

Section: Automate APIs and Protocols

Explanation

Explanation/Reference:

Section: Automate APIs and Protocols

Symbols after data node names: "?" means an optional node, "!" means a presence container, and "*" denotes a list and leaf-list.

QUESTION 19

The automation engineer must replace device configuration using RESTCONF. How is this configured using the Python library Requests?

- A. delete()
- B. post()
- C. put()
- D. patch()

Correct Answer: C

Section: Automate APIs and Protocols

Explanation

Explanation/Reference:

Section: Automate APIs and Protocols

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

QUESTION 20

Which function is available in NETCONF and unavailable in RESTCONF?

- A. configuration changes are automatically activated
- B. uses the YANG data models to communicate
- C. supports JSON and data encoding
- D. validates the content of a candidate datastore

Correct Answer: D

Section: Automate APIs and Protocols

Explanation

Explanation/Reference:

Section: Automate APIs and Protocols

Reference: https://www.cisco.com/c/en/us/td/docs/ios-xml/ios/prog/configuration/169/b_169_programmability_cg/configuring_yang_datamodel.html

QUESTION 21

Which setting is used for the dampening period when configuring an on-change publication for YANG-push versus OpenConfig?

- A. null
- B. -1
- C. 0
- D. 1000

Correct Answer: C

Section: Automate APIs and Protocols

Explanation**Explanation/Reference:**

Section: Automate APIs and Protocols

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

QUESTION 22

Setting is used for the dampening period when configuring an on-change publication for YANG-push versus OpenConfig. What are two characteristics of synchronous calls to APIs? (Choose two.)

- A. They block until a response is returned from the servers
- B. They make an application less portable, so asynchronous calls are preferred
- C. They add perceived latency to an application if data is not received
- D. Calls are limited to specific programming languages
- E. They do not block while waiting for the API to be processed

Correct Answer: AC

Section: Automate APIs and Protocols

Explanation**Explanation/Reference:**

Section: Automate APIs and Protocols

Reference: <https://docs.cloudmgmt.cisco.com/display/40API/Synchronous+and+Asynchronous+APIs>

QUESTION 23

Which two Netmiko methods are used to configure a device? (Choose two.)

- A. send_config()
- B. send_control_from_file()
- C. send_config_set()
- D. send_command()
- E. send_config_from_file()

Correct Answer: CE

Section: Network Device Programmability

Explanation**Explanation/Reference:**

Section: Network Device Programmability

Reference: <https://pynet.twb-tech.com/blog/automation/netmiko.html>

QUESTION 24

```
- name: Create VRFs as defined by local_vrfs
  ios_vrf:
    vrfs: "{{ local_vrfs }}"
    state: 
  register: addvrf
```

Refer to the exhibit. An engineer creates an Ansible playbook to configure VRF information using a local_vrfs variable. The code must be completed so that it can be tested. Which string completes the code?

- A. present
- B. up
- C. on
- D. active

Correct Answer: A

Section: Network Device Programmability

Explanation

Explanation/Reference:

Section: Network Device Programmability

Reference: https://docs.ansible.com/ansible/latest/modules/ios_vrf_module.html

QUESTION 25

```
<rpc message-id="101" xmlns="urn:ietf:params:xml:ns:netconf:base:1.0">
  <establish-subscription
    xmlns="urn:ietf:params:xml:ns:yang:ietf-event-notifications"
    xmlns:yp="urn:ietf:params:xml:ns:yang:ietf-yang-push">
    <stream>yp:yang-push</stream>
    <yp:xpath-filter>/mdt-oper:mdt-oper-data/mdt-subscriptions</yp:xpath-filter>
    <yp: <input type="text" value="period"/> >1000</yp: <input type="text" value="period"/> >
  </establish-subscription>
</rpc>
```

Refer to the exhibit. Which XML tag completes this NETCONF telemetry subscription with a Cisco IOS XE device?

- A. crontab
- B. cadence
- C. frequency
- D. period

Correct Answer: D

Section: Network Device Programmability

Explanation

Explanation/Reference:

Section: Network Device Programmability

Reference: https://www.cisco.com/c/en/us/td/docs/ios-xml/ios/prog/configuration/1610/b_1610_programmability_cg/model_driven_telemetry.html

QUESTION 26

Which two statements are benefits of YANG-push telemetry data over traditional data collection methods? (Choose two.)

- A. The subscription requests use less bandwidth than SNMP polls.
- B. It uses UDP rather than TCP.
- C. You can precisely define data subscriptions.
- D. It scales better than SNMP.
- E. It is supported on more devices than SNMP.

Correct Answer: BC

Section: Network Device Programmability

Explanation

Explanation/Reference:

Section: Network Device Programmability

Reference: <https://tools.ietf.org/id/draft-song-ntf-01.html>

QUESTION 27

FILL BLANK

Fill in the blank to complete the statement.

is a solution for automating the configuration of a device when it is first powered on, using DHCP and TFTP.

A. Zero touch provisioning (ZTP)

Correct Answer: A

Section: Network Device Programmability

Explanation

Explanation/Reference:

Section: Network Device Programmability

Reference: <https://developer.cisco.com/docs/ios-xe/#!day-zero-provisioning-quick-start-guide>

QUESTION 28

Which tag is required when establishing a YANG-push subscription with a Cisco IOS XE device?

- A. <yp:period>
- B. <yp:subscription-result>
- C. <yp:subscription-id>
- D. <yp:xpath-filter>

Correct Answer: D

Section: Network Device Programmability

Explanation

Explanation/Reference:

Section: Network Device Programmability

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

QUESTION 29

```

from device_info import ios_xel
from ncclient import manager
import xmltodict

netconf_filter = open('filter-ietf-interfaces.xml').read()

if __name__ == '__main__':
    with manager.connect(host=ios_xel["address"],
                        port=ios_xel["port"],
                        username=ios_xel["username"],
                        password=ios_xel["password"],
                        hostkey_verify=False) as m:

        netconf_reply = m.get(netcong_filter)

        intf_details = xmltodict.parse(netconf_reply.xml) ["rpc-reply"] ["data"]
        intf_config = intf_details["interfaces"] ["interface"]
        intf_info = intf_details["interfaces-state"] ["interface"]

        print("")
        print("Interface Details:")
        print(" Name: {}".format( intf_info["name"] ))
        print(" Description: {}".format(intf_config["description"]))
        print(" Type: {}".format(intf_config["type"] ["#text"]))
        print(" MAC Address: {}".format(intf_info["phys-address"]))
        print(" Packet Input: {}".format(intf_info["statistics"] ["in-unicast-pkts"]))
        print(" Packet Output: {}".format(intf_info["statistics"] ["out-unicast-pkts"]))

```

```

<filter>
  <interfaces xmlns="urn:ietf:params:xml:ns:yang:ietf-interfaces">
    <interface>
      <name>GigabitEthernet2</name>
    </interface>
  </interfaces>
  <interfaces-state xmlns="urn:ietf:params:xml:ns:yang:ietf-interfaces">
    <interface>
      <name>GigabitEthernet2</name>
    </interface>
  </interfaces-state>
</filter>

```

Refer to the exhibits. An engineer creates a Python scripts using ncclient to display interface information. The code must be completed so that it can be tested. Which expression completes the highlighted section in the format call?

- A. intf_info
- B. intf_config
- C. intf_get
- D. intf_config[0]

Correct Answer: A

Section: Network Device Programmability

Explanation

Explanation/Reference:

Section: Network Device Programmability

The highlighted format cell for print is for the host.

Reference: https://github.com/CiscoDevNet/dnac-python-path-trace/blob/master/path_trace.py

QUESTION 30

```
from ncclient import manager
with manager.connect(
    host='10.0.0.1',
    port=12022,
    username='cisco',
    password='cisco',
    hostkey_verify=False,
    allow_agent=False,
    look_for_keys=False,
    device_params={'name': 'iosxe'},
) as m:
```

Refer to the exhibit. What is the correct ncclient method to use to collect the running configuration of a Cisco IOS XE device that uses NETCONF?

- A. config=m.copy_config(source='running')
- B. config=m.get(source='running')
- C. config=m.collect_config(source='running')
- D. config=m.get_config(source='running')

Correct Answer: A

Section: Network Device Programmability

Explanation

Explanation/Reference:

Section: Network Device Programmability

Reference: <https://ncclient.readthedocs.io/en/latest/>

QUESTION 31

FILL BLANK

Fill in the blanks to complete this API request against the Cisco SD_WAN vManage Statistics API, which specified a deviceId of 260faff9-2d31-4312-cf96-143b46db0211, a local-color of biz-internet, and a remote-color of gold.

<https://vmanage-ip-address:8443/dataservice/device/app-route/statistics?> 260faff9-2d31-4312-cf96-143b46db0211 biz-internet gold

- A. deviceId=, local-color, remote-color

Correct Answer: A

Section: Network Device Programmability

Explanation

Explanation/Reference:

Section: Network Device Programmability

Reference:

https://sdwan-docs.cisco.com/Product_Documentation/Command_Reference/Command_Reference/vManage_REST_APIs/Real-Time_Monitoring_APIs/Application-Aware_Routing#Statistics

QUESTION 32

What does the command boot ipxe forever switch 1 perform when executed on a Cisco IOS XE device?

- A. It continuously sends DHCP requests for iPXE until the device boots with an image.

- B. It continuously sends DNS requests for iPXE until the device restarts.
- C. It continuously sends DNS requests for iPXE until the device boots with an image.
- D. It continuously sends DHCP requests for iPXE until the device restarts.

Correct Answer: A

Section: Network Device Programmability

Explanation

Explanation/Reference:

Section: Network Device Programmability

Reference: https://www.cisco.com/c/en/us/td/docs/switches/lan/catalyst3850/software/release/16-5/configuration_guide/prog/b_165_prog_3850_cg/ipxe.html

QUESTION 33

```
headers = {'Content-Type': 'application/yang-data+json',
           'Accept': 'application/yang-data+json'}

response =
requests.get("https://10.10.20.48:443/restconf/data/ietf-interfaces:interfaces",
             auth=("cisco", "cisco_1234!"),
             headers=headers,
             verify=False
            )

i=0
for interface in interfaces:
    if "Loopback" in interface ["name"]:
        print(interfaces[i] ["ietf-ip:ipv4"] ["address"] [0] ["ip"])
    i=i+1
```

Refer to the exhibit. A Python script is used to configure a Cisco IOS XE device. The script must be updated to print the IP addresses of all the loopback interfaces. Which statement should be added before the loop?

- A. interfaces = response.json()["ietf-interfaces:interfaces"]
- B. interface = response.json()["ietf-interfaces:interfaces"]
- C. interface = response.json()["ietf-interfaces:interfaces"]["interface"]
- D. interfaces = response.json()["ietf-interfaces:interfaces"]["interface"]

Correct Answer: D

Section: Network Device Programmability

Explanation

Explanation/Reference:

Section: Network Device Programmability

Reference: https://blog.wimwauters.com/networkprogrammability/2020-04-04_restconf_python/

QUESTION 34

Which environment must be enabled to complete the Zero-Touch Provisioning process on a Cisco IOS XE device?

- A. TCL
- B. ZTP Open Service Container
- C. EEM
- D. Guest Shell

Correct Answer: D

Section: Network Device Programmability**Explanation****Explanation/Reference:**

Section: Network Device Programmability

Reference: https://www.cisco.com/c/en/us/td/docs/switches/lan/catalyst3850/software/release/16-5/configuration_guide/prog/b_165_prog_3850_cg/zero_touch_provisioning.pdf

QUESTION 35

FILL BLANK

Fill in the blank to complete the statement.

_____ is a solution for automating the configuration of a device when it is first powered on, using DHCP and TFTP.

A. Zero-touch provisioning

Correct Answer: A

Section: Network Device Programmability**Explanation****Explanation/Reference:**

Section: Network Device Programmability

Reference: https://www.cisco.com/c/en/us/td/docs/ios-xml/ios/prog/configuration/169/b_169_programmability_cg/zero_touch_provisioning.html

QUESTION 36

```
{
  "ietf-interfaces:interfaces": {
    "interface": [
      {
        "name": "GigabitEthernet1",
        "description": "MANAGEMENT INTERFACE",
        "type": "iana-if-type:ethernetCsmacd",
        "enabled": true,
        "ietf-ip:ipv4": {
          "address": [
            {
              "ip": "10.10.20.48",
              "netmask": "255.255.255.0"
            }
          ]
        },
        "ietf-ip:ipv6": {}
      }
    ]
  }
}
```

VCEup

Refer to the exhibit. A RESTCONF **GET** request is sent to a Cisco IOS XE device. A portion of the response is shown in the exhibit. Which module name corresponds to the YANG model referenced in the request?

- A. ietf-interfaces:ietf-ipv4
- B. iana-if-type:ethernetCsmacd
- C. ietf-interfaces:interfaces
- D. ietf-interfaces

Correct Answer: A

Section: Network Device Programmability**Explanation**

Explanation/Reference:

Section: Network Device Programmability

QUESTION 37

```
https://ios-xe:9443/restconf/data/ietf-routing:routing/routing-
instance=default/

<routing-instance xmlns:"urn:ietf:params:xml:ns:yang:ietf-
routing" xmlns:rt="urn:ietf:params:xml:ns:yang:ietf-routing">
  <name>default</name>
  <description>default-vrf [read-only]</description>
  <routing-protocols>
    <routing-protocol>
      <type>static</type>
      <name>l</name>
      <static-routes>
        <ipv4 xmlns:"urn:ietf:params:xml:ns:yang:ietf-
ipv4-unicast-routing">
          <route>
            <destination-
prefix>0.0.0.0/0</destination-prefix>
            <next-hop>
              <outgoing-
interface>GigabitEthernet1</outgoing-interface>
            </next-hop>
          </route>
        </ipv4>
      </static-routes>
    </routing-protocol>
  </routing-protocols>
</routing-instance>
```

VCEup

Refer to the exhibit. A RESTCONF **GET** request is sent to a Cisco IOS XE device. The base URL of the request and the response in XML format are shown in the exhibit. What is the YANG data node that is referenced in the response?

- A. route is a leaf list
- B. static-routes is a container
- C. static-routes is a list
- D. routing-instance is a container

Correct Answer: A**Section:** Network Device Programmability**Explanation****Explanation/Reference:**

Section: Network Device Programmability

Reference: https://www.cisco.com/c/en/us/td/docs/ios-xml/ios/prog/configuration/166/b_166_programmability_cg/restconf_prog_int.pdf**QUESTION 38**

What are two characteristics of REST API calls? (Choose two.)

- A. unencrypted
- B. non-cacheable
- C. stateless
- D. implemented over HTTP
- E. parameters passed in the headers

Correct Answer: CD

Section: Network Device Programmability

Explanation

Explanation/Reference:

Section: Network Device Programmability

Reference: https://www.cisco.com/c/en/us/td/docs/wireless/mse/8-0/MSE_REST_API/Guide/Cisco_MSE_REST_API_Guide/REST_Introduction.pdf

QUESTION 39

```
# Simple Application to run a few commands on a Cisco Device
ipaddresses = ['192.168.0.1', '192.168.0.5', '10.10.10.10']
username = "admin"
password = "cisco123"
commands_to_run=["show ver", "show ip interface brief"]
Debug = True

for device in ipaddresses:
    print ("Logging into "+device+", using "+username+"/"+password)

    # We want to execute commands on our device only if Debug=True

    for commands in commands_to_run:
        print ("    Executing "+commands+" on device: "+device)
```

Refer to the exhibit. What is the expected output from the Python code?

- A. Logging into 192.168.0.1, using admin/cisco123
Logging into 192.168.0.5, using admin/cisco123
Logging into 10.10.10.10, using admin/cisco123
Executing show ver on device: 192.168.0.1
Executing show ip interface brief on device: 192.168.0.1
Executing show ver on device: 192.168.0.5
Executing show ip interface brief on device: 192.168.0.5
Executing show ver on device: 10.10.10.10
Executing show ip interface brief on device: 10.10.10.10
- B. Logging into 192.168.0.1, using admin/cisco123
Logging into 192.168.0.5, using admin/cisco123
Logging into 10.10.10.10, using admin/cisco123
- C. Simple Application to run a few commands on a Cisco Device
Loggig into 192.168.0.1, using admin/cisco123
We want to execute commands on our device only if Debug=True
Executing show ver on device: 192.168.0.1
Executing show ip interface brief on device: 192.168.0.1
Logging into 192.168.0.5, using admin/cisco123
We want to execute commands on our device only if Debug=True
Executing show ver on device: 192.168.0.5
Executing show ip interface brief on device: 192.168.0.5
Logging into 10.10.10.10, using admin/cisco123
We want to execute commands on our device only if Debug=True
Executing show ver on device: 10.10.10.10
Executing show ip interface brief on device: 10.10.10.10

- D. Logging into 192.168.0.1, using admin/cisco123
 Executing show ver on device: 192.168.0.1
 Executing show ip interface brief on device: 192.168.0.1
Logging into 192.168.0.5, using admin/cisco123
 Executing show ver on device: 192.168.0.5
 Executing show ip interface brief on device: 192.168.0.5
Logging into 10.10.10.10, using admin/cisco123
 Executing show ver on device: 10.10.10.10
 Executing show ip interface brief on device: 10.10.10.10

Correct Answer: D

Section: Network Device Programmability

Explanation

Explanation/Reference:

Section: Network Device Programmability

QUESTION 40

The Cisco DNA Center Sites API must be used to add a device to a site, but only the site name is available. Which API call must be used to retrieve the site identifier so that the device can be properly added to the network?

- A. /dna/intent/api/site/siteId
- B. /dna/intent/api/site
- C. /dna/intent/api/v1/site
- D. /dna/intent/api/v1/site/siteName

Correct Answer: C

Section: Cisco DNA Center

Explanation

Explanation/Reference:

Section: Cisco DNA Center

Reference: <https://community.cisco.com/t5/networking-blogs/welcome-to-the-dna-center-api-support-community/ba-p/3663632>

QUESTION 41

When a Grafana dashboard is built to receive network events from Cisco DNA Center, which integration bundle is enabled to send notifications?

- A. Basic ITSM CMDB Synchronization
- B. DNA Center Rest API
- C. Network Events for REST API Endpoint
- D. Network Issue Monitor and Enrichment for ITSM

Correct Answer: B

Section: Cisco DNA Center

Explanation

Explanation/Reference:

Section: Cisco DNA Center

Reference: https://www.cisco.com/c/en/us/td/docs/cloud-systems-management/network-automation-and-management/dna-center/1-3/admin_guide/b_cisco_dna_center_admin_guide_1_3/b_dnac_admin_guide_1_2_10_chapter_010.html

QUESTION 42

Which field must be completed in Cisco DNA Center when a network discovery is initiated?

- A. SNMP read community string
- B. Enable password
- C. NETCONF port
- D. Discovery type

Correct Answer: D
Section: Cisco DNA Center
Explanation

Explanation/Reference:
Section: Cisco DNA Center

Reference: https://www.cisco.com/c/dam/en_us/training-events/product-training/dnac-13/DNAC13_AddingDevicesByUsingDiscovery.pdf (p.26)

QUESTION 43

Webhooks that are generated by Cisco DNA Center are REST calls with which properties?

- A. JSON payload delivered via PUT
- B. XML payload delivered via POST
- C. JSON payload delivered via POST
- D. XML payload delivered via PUT

Correct Answer: A
Section: Cisco DNA Center
Explanation

Explanation/Reference:
Section: Cisco DNA Center

Reference: <https://developer.cisco.com/docs/dna-center/#!using-id-values-in-rest-requests>

QUESTION 44

Which two API calls are used to trigger a device configuration sync in Cisco DNA Center? (Choose two.)

- A. PUT /dna/intent/api/v1/network-device
- B. PUT /dna/intent/api/v1/network-device/sync-all
- C. PUT /dna/intent/api/v1/network-device/{networkDeviceId}/sync
- D. PUT /dna/intent/api/v1/network-device/sync
- E. POST /dna/intent/api/v1/network-device/{networkDeviceId}/sync

Correct Answer: CE
Section: Cisco DNA Center
Explanation

Explanation/Reference:
Section: Cisco DNA Center

Reference: <https://github.com/CiscoDevNet/DNAC-JAVA-SDK/tree/master/DnacAppApi>

QUESTION 45

A network administrator must troubleshoot a network issue using Cisco DNA Center. Which API request helps to determine issue details, impacted hosts, or suggested actions for the resolution?

- A. /dna/intent/v1/issues
- B. /dna/intent/api/v1/issues
- C. /dna/intent/v1/issue-enrichment-details
- D. /dna/api/v1/client-health/issues

Correct Answer: B
Section: Cisco DNA Center
Explanation

Explanation/Reference:
Section: Cisco DNA Center

The intent/api/v1/issues request determine issue details, hosts impacted and suggests actions for resolution.

QUESTION 46

Which two network assurance features are provided by the Cisco DNA Center API? (Choose two.)

- A. site health
- B. license compliance health
- C. client health
- D. Cisco APIC appliance health
- E. Cisco DNA Center appliance health

Correct Answer: AC

Section: Cisco DNA Center

Explanation

Explanation/Reference:

Section: Cisco DNA Center

Reference: https://www.cisco.com/c/en/us/td/docs/cloud-systems-management/network-automation-and-management/dna-center/1-2/user_guide/b_dnac_ug_1_2/b_dnac_ug_1_2_chapter_010011.html

QUESTION 47

In which direction does the Cisco DNA Center Intent API communicate?

- A. westbound
- B. eastbound
- C. northbound
- D. southbound

Correct Answer: C

Section: Cisco DNA Center

Explanation

Explanation/Reference:

Section: Cisco DNA Center

The Intent API is a Northbound REST API that exposes specific capabilities of the Cisco DNA Center platform. The Intent API provides policy-based abstraction of business intent, allowing focus on an outcome rather than struggling with individual mechanisms steps. The RESTful Cisco DNA Center Intent API uses HTTPS verbs (GET, POST, PUT, and DELETE) with JSON structures to discover and control the network.

Reference: <https://developer.cisco.com/docs/dna-center/#!/cisco-dna-center-platform-overview/intent-api-northbound>

QUESTION 48

Which two features are characteristics of software-defined networks when compared to traditional infrastructure? (Choose two.)

- A. configured box-by-box
- B. changed manually
- C. use overlay networks
- D. designed to change
- E. require software development experience to manage

Correct Answer: CD

Section: Cisco DNA Center

Explanation

Explanation/Reference:

Section: Cisco DNA Center

Reference: https://www.cisco.com/c/en/us/td/docs/solutions/Enterprise/Data_Center/VMDC/SDN/SDN.html

QUESTION 49

When accessing the /device-detail endpoint in Cisco DNA Center, what is an acceptable SearchBy parameter value?

- A. platform type
- B. IP address
- C. software version
- D. MAC address

Correct Answer: D

Section: Cisco DNA Center

Explanation

Explanation/Reference:

Section: Cisco DNA Center

QUESTION 50

Which two Cisco DNA Center features are needed to add legacy devices on the platform? (Choose two.)

- A. multivendor SDK support
- B. trusted device profile update
- C. device package creation
- D. device package download
- E. device profile replication

Correct Answer: BC

Section: Cisco DNA Center

Explanation

Explanation/Reference:

Section: Cisco DNA Center

QUESTION 51

Which path do calls begin with to implement Cisco DNA Center Intent APIs?

- A. /intent
- B. /dna/v1
- C. /dna/api/intent/v1/
- D. /dna/system/api/v1/

Correct Answer: D

Section: Cisco DNA Center

Explanation

Explanation/Reference:

Section: Cisco DNA Center

Reference: <https://developer.cisco.com/docs/dna-center/#!/device-provisioning/endpoints-and-methods-used>

QUESTION 52

When the Cisco DNA Center Intent API is used as part of an automation process, what prompts receiving a HTTP 206 status code on a call?

- A. The client authentication credentials that are included with the request are missing or invalid
- B. The client made a request for partial content matching a range header
- C. The client request was successful, but there is no content associated with the request
- D. The client made a request that has been received but not yet acted upon

Correct Answer: B

Section: Cisco DNA Center

Explanation

Explanation/Reference:

QUESTION 53

```
1 {
2   'data':
3     [
4       {
5         'count': 4,
6         'detailsURL': '',
7         'name': 'vEdge Hardware Health',
8         'status': 'error',
9         'statusList':
10          [
11            {
12              'count': 4,
13              'detailsURL': '/dataservice/device/hardwarehealth/detail?state=normal',
14              'message': '4 {normal=4, warning=0, error=0}',
15              'name': 'normal',
16              'status': 'up'
17            }
18          ]
19       }
20     ]
21 }
```

Refer to the exhibit. Cisco SD-WAN deployment must be troubleshooted using vManage APIs. A call to vEdge Hardware Health API returns the data in the exhibit (only a portion is shown). If this JSON is converted to a Python dictionary and assigned to the variable “d”, how the status is accessed that is indicated on line 16?

- A. d[data][0][statusList][0][status]
- B. d['data']['statusList']['status']
- C. d{'data'}[0]['statusList'][0]['status']
- D. d['data'][0]['statusList'][0]['status']

Correct Answer: B

Section: Cisco SD-WAN

Explanation

Explanation/Reference:

Section: Cisco SD-WAN

The 0s in option AC and D are not logical in this scenario. The status tag already takes care of the error message.

QUESTION 54

FILL BLANK

Information about a rebooted device needs to be displayed with an ID of 260faff9-2d31-4312-cf96-143b46db0211 using the Cisco SD-WAN vManage Administration APIs. The API documentation states that deviceId is a required request parameter. Fill in the blank to create the REST call.

https://vmanage-ip-address:8443/dataservice/device/action/reboot **260faff9-2d31-4312-cf96-143b46db0211**

- A. "deviceId":

Correct Answer: A

Section: Cisco SD-WAN

Explanation

Explanation/Reference:

Section: Cisco SD-WAN

Reference: https://sdwan-docs.cisco.com/Product_Documentation/Command_Reference/Command_Reference/vManage_REST_APIs/Software_Maintenance_APIs/Reboot_Device

QUESTION 55

What is the purpose of using the Cisco SD-WAN vManage Certificate Management API?

- A. to generate a CSR
- B. to allocate resources to the certificate server
- C. to request a certificate from the certificate server
- D. to enable vManage Center

Correct Answer: A

Section: Cisco SD-WAN

Explanation

Explanation/Reference:

Section: Cisco SD-WAN

Reference: <https://www.cisco.com/c/en/us/td/docs/routers/sdwan/configuration/sdwan-xe-gs-book/cisco-sd-wan-overlay-network-bringup.html>

QUESTION 56

Which action allows for creating a Python script to pull inventory for Cisco SD-WAN Viptela devices using the Viptela library in the code?

- A. from urllib.request import Viptela
- B. from viptela.devices import Viptela
- C. from viptela.viptela import Viptela
- D. from viptela.library import Viptela

Correct Answer: B

Section: Cisco SD-WAN

Explanation

Explanation/Reference:

Section: Cisco SD-WAN

The viptela.devices import viptela can be used to put inventory from Cisco SD WAN viptela devices.

QUESTION 57

What is primary purpose of using the Cisco SD-WAN vManage Certificate Management API?

- A. to securely deploy vManage
- B. to report an issue to Cisco TAC
- C. to install signed certificates
- D. to contact Enterprise Certificate Authority

Correct Answer: A

Section: Cisco SD-WAN

Explanation

Explanation/Reference:

Section: Cisco SD-WAN

Reference: https://sdwan-docs.cisco.com/Product_Documentation/vManage_Help/Release_17.1/Configuration/Certificates

QUESTION 58

FILL BLANK

Fill in the blank to complete the URL for the Cisco SD-WAN API that retrieves a list of users that are logged into a device.

`http://<vmanage-ip-address>/dataservice/device/ deviceid=<deviceid>>`

A. interface?

Correct Answer: A
Section: Cisco SD-WAN
Explanation

Explanation/Reference:
Section: Cisco SD-WAN

<https://vmanage-ip-address/dataservice/device/interface?deviceId=deviceId>
Reference: https://sdwan-docs.cisco.com/Product_Documentation/Command_Reference/Command_Reference/vManage_REST_APIs/Real-Time_Monitoring_APIs/Interface

QUESTION 59

Which two API calls must be issued to attach a device template in Cisco SD-WAN? (Choose two.)

- A. "monitor device action status" GET API request with the device ID to display the status of the attach action
- B. "monitor device action status" GET API request with the process ID to display the status of the attach action
- C. PUT call to initiate the attach action
- D. POST call to initiate the attach action
- E. GET call to initiate the attach action

Correct Answer: BD
Section: Cisco SD-WAN
Explanation

Explanation/Reference:
Section: Cisco SD-WAN

Reference: https://sdwan-docs.cisco.com/Product_Documentation/Command_Reference/Command_Reference/vManage_REST_APIs/Device_Configuration_APIs/Device_Templates

QUESTION 60

During a network outage, a network administrator used the Cisco SD-WAN vManage Troubleshooting Dashboard APIs to troubleshoot the cause of the issue. Which detail is captured during troubleshooting with these APIs?

- A. VPN health
- B. public cloud resources
- C. connections summary
- D. OMP connection health

Correct Answer: C
Section: Cisco SD-WAN
Explanation

Explanation/Reference:
Section: Cisco SD-WAN

Reference: https://sdwan-docs.cisco.com/Product_Documentation/Command_Reference/Command_Reference/vManage_REST_APIs/Troubleshooting_APIs/Dashboard

QUESTION 61

```
{
  "data": [{
    "availableVersions": [],
    "chassisNumber": "4af9e049-0052-47e9-83af-81a5825f7ffe",
    "deviceIP": "4.4.4.60",
    "deviceModel": "vedge-cloud",
    "deviceType": "vedge",
    "host-name": "vedge01"
    ...
  }]
}
```

Refer to the exhibit. A Python script has been created that calls the Cisco SD-WAN vManage Device Inventory API to get the list of vEdges. The JSON data that returns to a Python dictionary has been converted and assigned to a variable named “d”. A portion of the JSON is shown in the exhibit. Which code will complete the expression **hostname=** to access the hostname?

- A. d["data"][0]["host-name"]
- B. d[data][0][host-name]
- C. d("data")[0]("host-name")
- D. d["host-name"]["data"]{0}

Correct Answer: A

Section: Cisco SD-WAN

Explanation

Explanation/Reference:

Section: Cisco SD-WAN

The double-quotations are a necessary syntax of Python. And for the json portion doesnt use parentheses. It always uses brackets. d["data"][0]["host-name"] is the only logical answer.

QUESTION 62

FILL BLANK

Fill in the blank to complete the URL for an API call to Cisco SD-WAN to display the history of the Bidirectional Forwarding Detection sessions that run on a vEdge router.

https://<vmanage-ip-address>/dataservice/device/ **deviceid=<deviceid>**

- A. bfd/synced/sessions?

Correct Answer: A

Section: Cisco SD-WAN

Explanation

Explanation/Reference:

Section: Cisco SD-WAN

<https://vmanage-ip-address/dataservice/device/bfd/synced/sessions?deviceid=deviceid>

Reference: https://sdwan-docs.cisco.com/Product_Documentation/Command_Reference/Command_Reference/vManage_REST_APIs/Real-Time_Monitoring_APIs/BFD

QUESTION 63

“https://vmanage-ip-address:8443/dataservice/template/policy/vsmart/activate/{policyId}”

Refer to the exhibit. A Python script must be created to deactivate vSmart Policy Cisco SD-WAN vManage Configuration APIs. The documentation states the URL is as shown in the exhibit for this REST call using POST, and that “**policyId**” is a required request parameter. Which line of Python code makes this call, assuming the variable “**s**” is a valid Requests session object and the variable “**policy-id**” is the policyId?

- A. s.port('https://vmanage:8443/dataservice/template/policy/vsmart/activate?policyId=%s' % policy_id)
- B. s.port('https://vmanage:8443/dataservice/template/policy/vsmart/activate/%s' % policy_id)
- C. s.port('https://vmanage:8443/dataservice/template/policy/vsmart/activate&policyId=%s' % policy_id)
- D. s.port('https://vmanage:8443/dataservice/template/policy/vsmart/activate/', data = {'policyId': policy_id})

Correct Answer: A
Section: Cisco SD-WAN
Explanation

Explanation/Reference:
 Section: Cisco SD-WAN

QUESTION 64

A configuration has been made to add to every switch port a new port description. The script worked initially, but after a few seconds, an HTTP 429 status code was received. What causes this error message from the Meraki cloud?

- A. The wrong API key is used to query the data.
- B. The rate limit of the Cisco Meraki API is exceeded.
- C. The API key has expired.
- D. The device goes offline while you poll the API dashboard.

Correct Answer: B
Section: Cisco Meraki
Explanation

Explanation/Reference:
 Section: Cisco Meraki

Reference: <https://community.meraki.com/t5/Developers-APIs/my-API-Limit-exceed-and-key-is-not-working/td-p/64034>

QUESTION 65

Which Python snippet receives a Meraki webhook request?

- A.

```
@app.route('/mynet/webhook', methods=['PUT'])
@app.accept_body(WebhookSchema)
def receive_webhook(**kwargs):
    send_sms_alert(kwargs['alertType'])
```
- B.

```
@app.route('/mynet/webhook', methods=['GET'])
@app.accept_body(WebhookSchema)
def receive_webhook(**kwargs):
    send_sms_alert(kwargs['alertType'])
```
- C.

```
@app.route('/mynet/webhook', methods=['PATCH'])
@app.accept_body(WebhookSchema)
def receive_webhook(**kwargs):
    send_sms_alert(kwargs['alertType'])
```
- D.

```
@app.route('/mynet/webhook', methods=['POST'])
@app.accept_body(WebhookSchema)
def receive_webhook(**kwargs):
    send_sms_alert(kwargs['alertType'])
```

Correct Answer: D
Section: Cisco Meraki
Explanation

Explanation/Reference:
 Section: Cisco Meraki

Reference: <https://github.com/CiscoDevNet/dnav3-code/blob/master/intro-meraki/meraki-07-webhooks/webhookreceiver.py>

QUESTION 66

Which two types of solution are built with the Meraki Location Scanning API? (Choose two.)

- A. networking automation
- B. mapping
- C. guest Wi-Fi
- D. Sense
- E. wayfinder

Correct Answer: BE

Section: Cisco Meraki

Explanation

Explanation/Reference:

Section: Cisco Meraki

Reference: <https://developer.cisco.com/meraki/build/wayfinding-mapwize/>

QUESTION 67

Which URI with the request body of **Request body: {"name":"Test","organizationId":<org_id>,"type":"appliance"}** creates a new Meraki network called "Test", when using APIs?

- A. PUT https://api.meraki.com/api/v0/organizations/<org_id>/networks
- B. POST <https://api.meraki.com/api/v0/networks>
- C. POST https://api.meraki.com/api/v0/organizations/<org_id>/networks/<net_id>
- D. POST https://api.meraki.com/api/v0/organizations/<org_id>/networks

Correct Answer: D

Section: Cisco Meraki

Explanation

Explanation/Reference:

Section: Cisco Meraki

Reference: https://documentation.meraki.com/zGeneral_Administration/Other_Topics/The_Cisco_Meraki_Dashboard_API

QUESTION 68

With the MV Sense API, which REST endpoint provides LUX level?

- A. [/merakimv/XXXX-XXXX-XXXX/light](#)
- B. [/merakimv/XXXX-XXXX-XXXX/raw_detections](#)
- C. [/merakimv/XXXX-XXXX-XXXX/0](#)
- D. [/merakimv/XXXX-XXXX-XXXX/zones](#)

Correct Answer: A

Section: Cisco Meraki

Explanation

Explanation/Reference:

Section: Cisco Meraki

Reference: <https://developer.cisco.com/meraki/mv-sense/#!/mqtt/lux-light-levels>

QUESTION 69

Which REST endpoint is used to create a Cisco Meraki network?

- A. POST [/organizations/{organizationId}/networks](#)
- B. PATCH [/networks{networkId}](#)
- C. PUT [/organizations/{organizationId}/networks](#)

D. POST /networks{networkId}

Correct Answer: A

Section: Cisco Meraki

Explanation

Explanation/Reference:

Section: Cisco Meraki

Reference: https://documentation.meraki.com/zGeneral_Administration/Other_Topics/The_Cisco_Meraki_Dashboard_API

QUESTION 70

Which URI removes an administrator from a Meraki network using an API call?

- A. DELETE https://api.meraki.com/api/v0/organizations/<org_id>/admins/<admin_id>
- B. DELETE https://api.meraki.com/api/v0/admins/<admin_id>
- C. PUT https://api.meraki.com/api/v0/organizations/<org_id>/admins/?delete=<admin_id>
- D. DELETE https://api.meraki.com/api/v0/organizations/<org_id>/admins/<user>

Correct Answer: A

Section: Cisco Meraki

Explanation

Explanation/Reference:

Section: Cisco Meraki

NOTE: The options are fundamentally wrong. The answer is correct. It should be api.meraki.com/api/v0/organizations/ Reference: https://documentation.meraki.com/zGeneral_Administration/Other_Topics/The_Cisco_Meraki_Dashboard_API (see delete an administrator)

QUESTION 71

```
{
  "id": "L_123456",
  "organizationId": 1357924,
  "name": "Long Island Office",
  "timeZone": "America/Los_Angeles",
  "tags": "tag1 tag2",
  "type": "combined",
  "disableMyMerakiCom": false
}
```

Refer to the exhibit. Which two parameters are mandatory when the Cisco Meraki API is used to create a network? (Choose two.)

- A. timezone
- B. disableMyMerakiCom
- C. type
- D. tags
- E. organizationId

Correct Answer: AE

Section: Cisco Meraki

Explanation

Explanation/Reference:

Section: Cisco Meraki

Without organizationID and timezone, you will not be able to create a network. Organizationid is necessary for the connection. Timezone is necessary for the network id.

QUESTION 72

Which HTTP request is valid to create a new wireless network called "Demo Wireless Network" in the organization "QASD-EROA-MKAW"?

- A. `POST /organizations/QASD-EROA-MKAW/networks`
Host: `https://api.meraki.com/api/v0`

```
{
  "name": "Demo Wireless Network",
  "organizationId": "QASD-EROA-MKAW",
  "type": "wireless"
}
```

- B. `POST /organizations/networks`
Host: `https://api.meraki.com/api/v0`

```
{
  "name": "Demo Wireless Network",
  "organizationId": "QASD-EROA-MKAW",
  "type": "combined"
}
```

- C. `POST /organizations/networks`
Host: `https://api.meraki.com/api/v0`

```
{
  "name": "Demo Wireless Network",
  "organizationId": "QASD-EROA-MKAW",
  "type": "wireless"
}
```

- D. `POST /organizations/QASD-EROA-MKAW/networks`
Host: `https://api.meraki.com/api/v0`

```
{
  "name": "Demo Wireless Network",
  "type": "combined"
}
```

Correct Answer: A

Section: Cisco Meraki

Explanation

Explanation/Reference:

Section: Cisco Meraki

Reference: https://documentation.meraki.com/zGeneral_Administration/Other_Topics/The_Cisco_Meraki_Dashboard_API

QUESTION 73

```
{
  "name": "Long Island Office",
  "timeZone": "America/Los_Angeles",
  "tags": "tag1 tag2",
  "type": "wireless",
  "disableMyMerakiCom": false
}
```

Refer to the exhibit. Which two parameters are mandatory when the Cisco Meraki API is used to create a network? (Choose two.)

- A. tags
- B. timeZone
- C. type
- D. disableMyMerakiCom
- E. name

Correct Answer: BE

Section: Cisco Meraki

Explanation

Explanation/Reference:

Section: Cisco Meraki

QUESTION 74

A programmer is creating a Meraki webhook Python script to send a message to Webex Teams. Which two elements should be configured to create this script? (Choose two.)

- A. gRPC credentials
- B. Webex Teams access token
- C. XML formatted request
- D. user authentication count
- E. webhook server secret

Correct Answer: BD

Section: Cisco Meraki

Explanation

Explanation/Reference:

Section: Cisco Meraki

QUESTION 75

What is a capability of MV Sense MQTT API?

- A. request and subscribe to historical, current, or real-time data
- B. automate the configuration of networking devices
- C. monitor the network and auto adjust for optimal performance
- D. create email alerts for user that violate the security configuration

Correct Answer: A

Section: Cisco Meraki

Explanation

Explanation/Reference:

Section: Cisco Meraki

Reference: <https://developer.cisco.com/meraki/mv-sense/#!/mv-sense-overview/introduction>

QUESTION 76

Which two factors influence the location accuracy of a device using Scanning APIs? (Choose two.)

- A. AP placement
- B. device manufacturer/OS
- C. client device orientation
- D. battery life of the device
- E. amount of device antennas

Correct Answer: AC

Section: Cisco Meraki

Explanation

Explanation/Reference:
Section: Cisco Meraki

The geo-location coordinates (latitude, longitude) and X,Y location data accuracy can vary based on a number of factors and should be considered a best effort estimate. AP placement, environmental conditions, and client device orientation can influence X,Y estimation; experimentation can help improve the accuracy of results or determine a maximum acceptable uncertainty for data points.
Reference: <https://developer.cisco.com/meraki/guides/location-services-solution-guide/>

QUESTION 77
DRAG DROP

Drag and drop the code from the bottom onto the box where the code is missing in the Ansible playbook to apply the configuration to an interface on a Cisco IOS XE device. Not all options are used.

Select and Place:

```
- name: configure interface settings
  :
  lines:
    - ip address 172.31.1.1 255.255.255.0
    - no shutdown
  : interface GigabitEthernet1/0
```

ioscmd

parents

losconfig

interface

iosxe

ios_config

Correct Answer:

```
- name: configure interface settings
  ios_config :
  lines:
    - ip address 172.31.1.1 255.255.255.0
    - no shutdown
  interface : interface GigabitEthernet1/0
```

ioscmd

parents

losconfig

iosxe

Section: Network Programmability Foundation
Explanation

Explanation/Reference:

QUESTION 78
DRAG DROP

Drag and drop the commands to the Ansible playbook that applies configuration to an interface on a Cisco IOS XE device. Not all options are used.

Select and Place:

Answer Area

ioscmd	interface
parents	iosxe
iosconfig	ios_config

```
- name: configure interface settings
  [ ]:
  lines:
    - ip address 172.31.1.1 255.255.255.0
    - no shutdown
    [ ]: interface GigabitEthernet1/0
```

Correct Answer:

Answer Area

ioscmd	interface
	iosxe
iosconfig	

```
- name: configure interface settings
  ios_config:
  lines:
    - ip address 172.31.1.1 255.255.255.0
    - no shutdown
    parents: interface GigabitEthernet1/0
```

Section: Network Device Programmability
Explanation

Explanation/Reference:

QUESTION 79
DRAG DROP

Drag and drop the characteristic from the left onto the monitoring type described on the right.

Select and Place:

Answer Area

Troubleshoot instant high spikes of CPU and memory load on network devices.

Ask network devices for any metric at any time.

Prevent network devices from listening for network connections.

Minimize the work required by device agents by pushing data as soon as the data is generated.

Streaming Telemetry

Traditional Network Monitoring

Correct Answer:

Answer Area

Streaming Telemetry

Troubleshoot instant high spikes of CPU and memory load on network devices.

Ask network devices for any metric at any time.

Prevent network devices from listening for network connections.

Traditional Network Monitoring

Minimize the work required by device agents by pushing data as soon as the data is generated.

Section: Network Device Programmability
Explanation

Explanation/Reference:

Reference:
https://www.cisco.com/c/en/us/td/docs/iosxr/ncs5500/telemetry/70x/b-telemetry-cg-ncs5500-70x/b-telemetry-cg-ncs5500-70x_chapter_010.html

QUESTION 80
 DRAG DROP

A Cisco DNA Center script must be written to retrieve a list of interfaces on a switch. Drag and drop the API calls that are needed to return the list of interfaces using the Command Running APIs from the left into the correct sequence on the right.

Select and Place:

Answer Area

Get task by ID.	run 1
Get file by ID.	run 2
Run read-only commands on devices.	run 3
Get device list.	run 4

Correct Answer:

Answer Area

	Run read-only commands on devices.
	Get device list.
	Get file by ID.
	Get task by ID.

Section: Cisco SD-WAN

Explanation

Explanation/Reference:

Reference: <https://developer.cisco.com/docs/dna-center/#!using-id-values-in-rest-requests>

QUESTION 81

DRAG DROP

```
GET: https://dnacsrvt/api/v1/network-device
{
  "response": [
    {
      "type": "Cisco Catalyst 9300 switch",
      "errorCode": null,
      "family": "Switches and Hubs",
      "location": "DC1",
      "role": "ACCESS",
      "macAddress": "a1:2b:30:40:41:50",
      "hostname": "cat_9k_1",
      "serialNumber": "FCW2136LOAK",
      "softwareVersion": "16.6.1",
      "locationName": null,
      "upTime": "13 days, 18:30:33.81",
      "softwareType": "IOS-XE",
      "collectionStatus": "Managed",
      "managementIpAddress": "10.10.22.66",
      "platformId": "C9300-24UX",
      "reachabilityStatus": "Reachable",
      "series": "Cisco Catalyst 9300 Series Switches",
      "snmpContact": "",
      "snmpLocation": ""
    }
  ]
}
```

Refer to the exhibit. A **GET** request is issued to the Cisco DNA Center REST API. Drag and drop the **GET** request URL subpaths from the left onto the objectives on the right. Not all options are used.

Select and Place:

Answer Area

/api/v1/network-device?softwareType=IOS-XE&softwareVersion=16.4.2

/api/v1/network-device?location=DC2

/api/v1/network-device?(softwareType=IOS-XE) AND (softwareVersion=16.4.2)

/api/v1/network-device?family=Switches and Hubs

/api/v1/network-device?ipAddress=10.222.10.35

/api/v1/network-device?snmpLocation=DC2

/api/v1/network-device?managementIpAddress=10.222.10.35

/api/v1/network-device?family=cat_9k_1

List devices that are configured by using SNMP to be in the DC2 location

List device types

List the device that has an IP address of 10.222.10.35

Display Cisco IOS XE devices that have IOS version 16.4.2

Correct Answer:

Answer Area

/api/v1/network-device?softwareType=IOS-XE&softwareVersion=16.4.2	/api/v1/network-device?snmpLocation=DC2
/api/v1/network-device?location=DC2	/api/v1/network-device?managementIpAddress=10.222.10.35
	/api/v1/network-device?ipAddress=10.222.10.35
/api/v1/network-device?family=Switches and Hubs	/api/v1/network-device?(softwareType=IOS-XE) AND (softwareVersion=16.4.2)
/api/v1/network-device?family=cat_9k_1	

Section: Cisco DNA Center
Explanation

Explanation/Reference:

Reference:

https://meraki.cisco.com/lib/pdf/meraki_whitepaper_captive_portal.pdf

QUESTION 82

DRAG DROP

Drag and drop the steps from the left into the order on the right to create an end-to-end flow for Meraki Splash Screen using EXCAP.

Select and Place:

Answer Area

The AAA service authenticates the user and passes the appropriate web service	step 1
The client device is associated and redirected to the splash server	step 2
The Meraki cloud services invoke the AAA service to validate user credentials	step 3
Client sign-on is required	step 4

Correct Answer:

Answer Area

The client device is associated and redirected to the splash server

The Meraki cloud services invoke the AAA service to validate user credentials

Client sign-on is required

The AAA service authenticates the user and passes the appropriate web service

Section: Cisco Meraki
Explanation

Explanation/Reference: