Number: 300-435
Passing Score: 800
Time Limit: 120
File Version: 12.0

Exam Code: 300-435
Exam Name: Automating Cisco Enterprise Solutions (ENAUTO)

Exam A

QUESTION 1
Refer to the exhibit.

```
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"
}
```

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)
```

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

Correct Answer: C
Section:

QUESTION 2
Refer to the exhibit.

```
{
  "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": "6293780479392828O2",
  "alertType": "Air Marshal -Rogue AP detected",
  "occuredAt": "2019-01-26T14:18:54.000000Z",
  "organizationId": "123456",
  "organizationName": "Organization",
  "organizationUrl": "https://n1.meraki.com/o/.../manage/organization/overview",
  "networkId": "L_12345678901345678",
  "networkName": "Network",
  "networkUrl": "https://n1.meraki.com/.../manage/nodes/list",
  "version": "0.1"
  "SharedSecret": "supersecret",
  "sentAt: "2019-01-26T14:35:20.442869Z",
}
```


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)
```

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

Correct Answer: D
Section:
Explanation:
For number in range value is required for the application to send the alert. Bssids are also included.

QUESTION 3
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: B, D
Section:
Explanation:
:
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 4
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
```

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

Correct Answer: A
Section:
Explanation:
Reference: https://help.github.com/en/github/importing-your-projects-to-github/adding-anexisting-project-to- github-using-the-command-line

QUESTION 5
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: C, D
Section:
Explanation:
Reference: https://docs.cloudmgmt.cisco.com/display/40API/Synchronous+and+Asynchronous+APIs

QUESTION 6
Refer to the exhibit.

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

What is the result when running the Python scripts?

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

Correct Answer: B
Section:
Explanation:

```
neighbors = ['s1', 's2', 's3']
switch = {'hostname':'nexus','os':'7.0.3','neighbors':neighbors
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 7

Refer to the exhibit.

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

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:
Explanation:
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-cgasr9000-70x_chapter_011.html

QUESTION 8

Refer to the exhibit.

```
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
```

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: B
Section:
Explanation:
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 9
Refer to the exhibit.

```
<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>
```

How many YANG models does the NETCONF <get> operation interact with?

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

Correct Answer: B
Section:
Explanation:
:
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 10

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: D
Section:
Explanation:
Reference: https://www.cisco.com/c/en/us/products/collateral/switches/nexus-9000-seriesswitches/white- paper-c11-741518.html

QUESTION 11
Refer to the exhibit.

```
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())
```

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:
Explanation:
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 12
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:
Explanation:
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 13
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", \
    "passphase":"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'
```

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

Correct Answer: B
Section:
Explanation:
:P
UT is used to update the snmp network ID. The access has to be community and not users.
Therefore, option B is correct.

QUESTION 14
Refer to the exhibit.

```
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
```

Which NETCONF statement type is represented by +--rw address* [ip]?

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

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

QUESTION 15
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:
Explanation:
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 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: C, E

Section:
Explanation:
Reference: https://pynet.twb-tech.com/blog/automation/netmiko.html

QUESTION 17
Refer to the exhibit.

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

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

QUESTION 18
Refer to the exhibit.

```
<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:[          ]>1000</yp:[          ] >
  </establish-subscription>
</rpc>
```

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:
Explanation:
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 19

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: A, C
Section:
Explanation:
Reference: https://tools.ietf.org/id/draft-song-ntf-01.html

QUESTION 20
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. ZTP

Correct Answer: A
Section:
Explanation:
Reference: https://developer.cisco.com/docs/ios-xe/#!day-zero-provisioning-quick-start-guide

QUESTION 21
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:
Explanation:
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
Refer to the exhibits.

```
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(            ["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>
```


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: B
Section:
Explanation:
:
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 23
Refer to the exhibit.

```
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:
```

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: D
Section:
Explanation:
Reference: https://ncclient.readthedocs.io/en/latest/

QUESTION 24
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:
Explanation:
&local-color= ,
&remote-color=
Explanation:
Reference:
https://sdwandocs.cisco.com/Product_Documentation/Command_Reference/Command_Reference/vManage_REST_APIs/Real-Time_Monitoring_APIs/Application-Aware_Routing#Statistics

QUESTION 25
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:
Explanation:
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 26
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:
Explanation:
Reference: https://community.cisco.com/t5/networking-blogs/welcome-to-the-dna-center-apisupport-community/ba-p/3663632

QUESTION 27
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:
Explanation:
Reference: https://www.cisco.com/c/en/us/td/docs/cloud-systems-management/networkautomation-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 28
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: A

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

QUESTION 29
Webhook 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: C
Section:
Explanation:
Reference: https://developer.cisco.com/docs/dna-center/#!using-id-values-in-rest-requests

QUESTION 30
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: A, D
Section:
Explanation:
Reference: https://github.com/CiscoDevNet/DNAC-JAVA-SDK/tree/master/DnacAppApi

QUESTION 31
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: C
Section:
Explanation:
The intent/api/v1/issues request determine issue details, hosts impacted and suggests actions for resolution.

QUESTION 32
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: A, C
Section:
Explanation:
Reference: https://www.cisco.com/c/en/us/td/docs/cloud-systems-management/networkautomation-and- management/dna-center/1-2/user_guide/b_dnac_ug_1_2/b_dnac_ug_1_2_chapter_010011.html

QUESTION 33
In which direction does the Cisco DNA Center Intent API communicate?

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

Correct Answer: C
Section:
Explanation:
:
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-platformoverview/intent-api- northbound

QUESTION 34
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: C, D
Section:
Explanation:
Reference:
https://www.cisco.com/c/en/us/td/docs/solutions/Enterprise/Data_Center/VMDC/SDN/SDN.html

QUESTION 35
Refer to the exhibit.

```
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            }
```

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

QUESTION 36
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:
Explanation:
Reference: https://sdwan-docs.cisco.com/Product_Documentation/Command_Reference/Command_Reference/vManage_REST_APIs/Software_Maintenance_APIs/Reboot_Device

QUESTION 37
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:
Explanation:
Reference: https://www.cisco.com/c/en/us/td/docs/routers/sdwan/configuration/sdwan-xe-gsbook/cisco-sd- wan-overlay-network-bringup.html

QUESTION 38
What is a capability of Cisco SD-WAN vManage Certificate Management API?

A. deletes existing installed certificates
B. distributes the root certificate to client devices
C. generates SSL certificates
D. creates certificate signing requests

Correct Answer: B
Section:

QUESTION 39
Refer to the exhibit.

```
- name: configure ntp
  ios_ntp:
    server: 10.1.1.20
    logging: false
    auth: false
```

NTP server 10.1.1.20 must be configured on the target Cisco IOS XE device without using authentication and logging. Which state should be added on a new line at the end of the Ansible task?

A. state: true
B. state: started
C. state: present
D. state: installed

Correct Answer: C
Section:

QUESTION 40

```
https://ios-xe:9443/restconf/data/ietf-interfaces:interfaces/

<interfaces xmlns="urn:ietf:params:xml:ns:yang:ietf-interfaces">
   <interface>
      <name>GigabitEthernet1</name>
      <description>DO NOT TOUCH ME</description>
      <type xmlns:ianaift="urn:ietf:params:xml:ns:yang:iana-if-type">ianaift:ethernetCsmacd</type>
      <enabled>true</enabled>
      <ipv4 xmlns="urn:ietf:params:xml:ns:yang:ietf-ip">
         <address>
            <ip>10.10.10.10</ip>
            <netmask>255.255.255.0</netmask>
         </address>
      </ipv4>
      <ipv6 xmlns="urn:ietf:params:xml:ns:yang:ietf-ip"/>
   </interface>
   <interface>
      <name>GigabitEthernet2</name>
      <description>WAN Interface</description>
      <type xmlns:ianaift="urn:ietf:params:xml:ns:yang:iana-if-type">ianaift:ethernetCsmacd</type>
      <enabled>true</enabled>
      <ipv4 xmlns="urn:ietf:params:xml:ns:yang:ietf-ip">
         <address>
            <ip>172.16.12.1</ip>
            <netmask>255.255.255.0</netmask>
         </address>
      </ipv4>
      <ipv6 xmlns="urn:ietf:params:xml:ns:yang:ietf-ip"/>
   </interface>
</interfaces>
```

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 are the two YANG data nodes and modules referenced in the response? (Choose two.)

A. description is a key field defined in the interface list
B. The ethernetCsmacd type is imported from the iana-if-type module
C. address is a container defined in the ietf-interfaces module
D. ipv4 is a container defined in the ietf-ip module
E. interface has the YANG data node type of container

Correct Answer: B, E
Section:

QUESTION 41
Which script binds a network to a template?

A.

```
import requests
url = "https://api.meraki.com/api/v0/networks/"  \
      "{{networkId}}/split"
payload = {
    "configTemplateId": "N_23952905",
    "autoBind": True
}
headers = {
    'Accept': '*/*',
    'Content-Type': 'application/json'
}
response = requests.request("POST", url,
                            headers=headers,
                            data=payload)
print(response.text.encode('utf8'))
```

B.

```
import requests
url = "https://api.meraki.com/api/v0/networks/"  \
      "{{networkId}}/bind"
payload = {
    "configTemplateId": "N_23952905",
    "autoBind": False
}
headers = {
    'Accept': '*/*',
    'Content-Type': 'application/json'
}
response = requests.request("POST", url,
                            headers=headers,
                            data=payload)
print(response.text.encode('utf8'))
```

C.

```
import requests
url = "https://api.meraki.com/api/v0/networks/"  \
      "{{networkId}}/bind"
payload = {
    "configTemplateId": "N_23952905",
    "autoBind": False
}
headers = {
    'Accept': '*/*',
    'Content-Type': 'application/json'
}
response = requests.request("PUT", url,
                            headers=headers,
                            data=payload)
print(response.text.encode('utf8'))
```

D.

```
import requests
url = "https://api.meraki.com/api/v0/networks/"  \
      "{{networkId}}/split"
payload = {
    "configTemplateId": "N_23952905",
    "autoBind": True
}
headers = {
    'Accept': '*/*',
    'Content-Type': 'application/json'
}
response = requests.request("PUT", url,
                            headers=headers,
                            data=payload)
print(response.text.encode('utf8'))
```

Correct Answer: D
Section:

QUESTION 42
An engineer needs to create a new network using the Meraki API. Which HTTP action to the URL https://api.meraki.com/api/v0/organizations/<new_org_id>/networks will result in a 201 response code?

A. GET
B. POST
C. PUT
D. ADD

Correct Answer: B
Section:
Explanation:
Reference: https://httpstatuses.com/201

QUESTION 43

What is a benefit of developing an application in a Python virtual environment?

A. The application operates in multiple target systems simultaneously.
B. The application supports concurrency or multithreading.
C. The application operates across systems that have different operating systems.
D. The development environment is isolated from Python projects that already exist.

Correct Answer: D
Section:
Explanation:
Reference: https://hackernoon.com/concurrent-programming-in-python-is-not-what-you-think-itisb6439c3f3e6a

QUESTION 44
Which solution is used for automating the configuration of a device when it is first powered on, using DHCP and TFTP?

A. PnP
B. iPXE
C. SNMP
D. ZTP

Correct Answer: D
Section:

QUESTION 45
Refer to the exhibit.

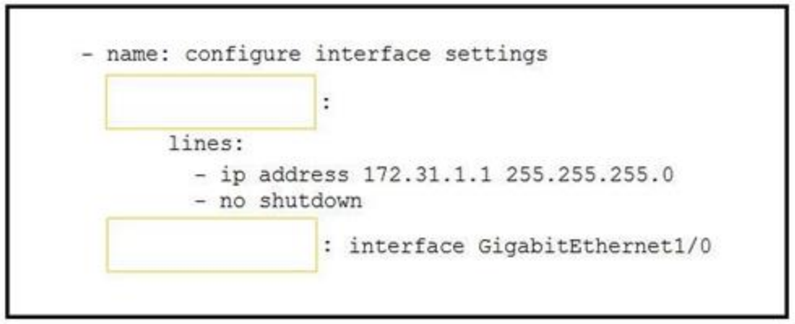
```
POST https://api.meraki.com/api/v0/organizations/<org id>/networks
Request body: { "name": "Template", "organizationId": <org id>, "type": "[          ]"}
Response code: 201
Response body: { "id": <network id>, "name": "Template",
                 "organization id": <org id>, "type": "[          ]", "tags": null }
```

A template is provided to a junior developer to automate the creation of a network on the Meraki dashboard. The new network needs to have the id 123456789 and support only wired network connections. What type needs to be added to the API?

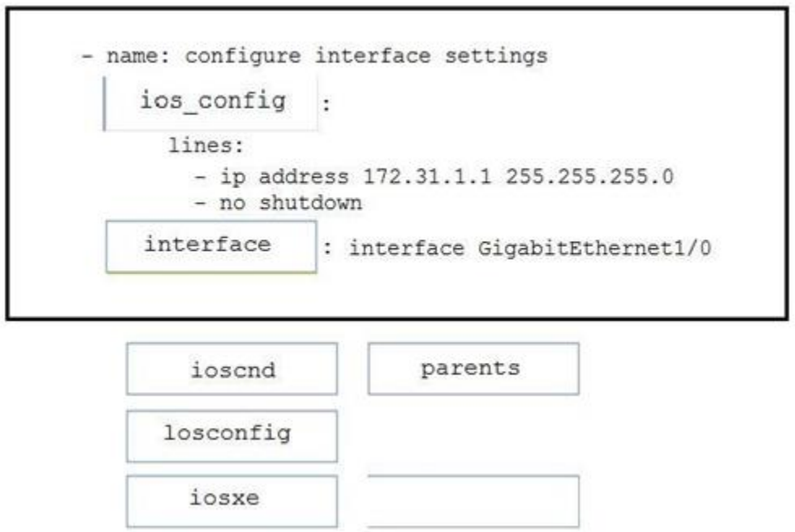
A. switch
B. wireless
C. appliance
D. systemsManager

Correct Answer: C
Section:

QUESTION 46
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:



Answer:



Select and Place:

Correct Answer:

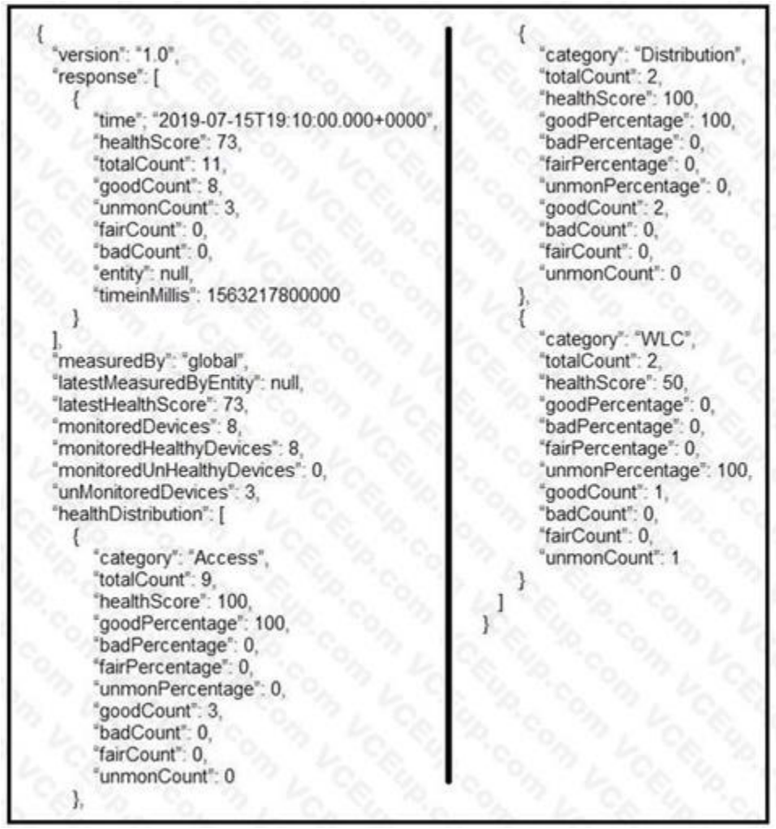
Section:
Explanation:

QUESTION 47
What is an advantage of software-defined networks as compared to traditional networks?

A. They simplify operations by creating a concrete copy of the network.
B. They reduce complexity by coupling the control and the data plane.
C. They enable older hardware to be repurposed without an investment in new infrastructure.
D. They deliver a distributed management architecture that provides better resilience to errors.

Correct Answer: D
Section:
Explanation:
Reference: https://www.ibm.com/services/network/sdn-versus-traditional-networking

QUESTION 48



```
{
  "version": "1.0",
  "response": [
    {
      "time": "2019-07-15T19:10:00.000+0000",
      "healthScore": 73,
      "totalCount": 11,
      "goodCount": 8,
      "unmonCount": 3,
      "fairCount": 0,
      "badCount": 0,
      "entity": null,
      "timeinMillis": 1563217800000
    }
  ],
  "measuredBy": "global",
  "latestMeasuredByEntity": null,
  "latestHealthScore": 73,
  "monitoredDevices": 8,
  "monitoredHealthyDevices": 8,
  "monitoredUnHealthyDevices": 0,
  "unMonitoredDevices": 3,
  "healthDistribution": [
    {
      "category": "Access",
      "totalCount": 9,
      "healthScore": 100,
      "goodPercentage": 100,
      "badPercentage": 0,
      "fairPercentage": 0,
      "unmonPercentage": 0,
      "goodCount": 3,
      "badCount": 0,
      "fairCount": 0,
      "unmonCount": 0
    },
    {
      "category": "Distribution",
      "totalCount": 2,
      "healthScore": 100,
      "goodPercentage": 100,
      "badPercentage": 0,
      "fairPercentage": 0,
      "unmonPercentage": 0,
      "goodCount": 2,
      "badCount": 0,
      "fairCount": 0,
      "unmonCount": 0
    },
    {
      "category": "WLC",
      "totalCount": 2,
      "healthScore": 50,
      "goodPercentage": 0,
      "badPercentage": 0,
      "fairPercentage": 0,
      "unmonPercentage": 100,
      "goodCount": 1,
      "badCount": 0,
      "fairCount": 0,
      "unmonCount": 1
    }
  ]
}
```


Refer to the exhibit. Which device type is functioning in a degraded state?

A. access point
B. distribution switch
C. access switch
D. wireless LAN controller

Correct Answer: D
Section:

QUESTION 49
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:
Explanation:
Reference: https://developer.cisco.com/meraki/mv-sense/#!mv-sense-overview/introduction

QUESTION 50
Refer to the exhibit.

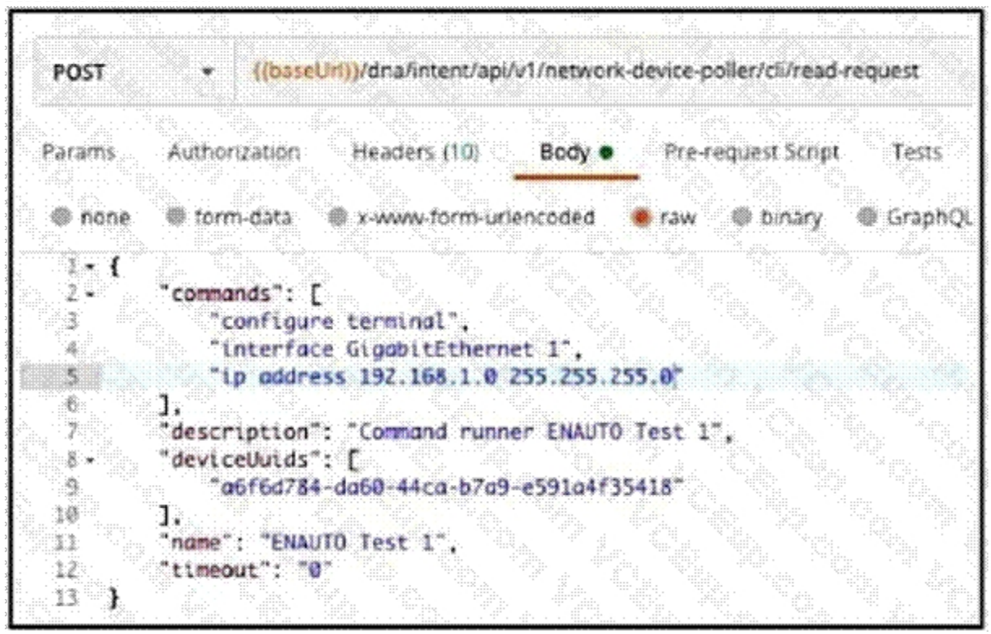
```
telemetry ietf subscription 154
 encoding encode-tdl
 filter xpath /memory-ios-xe-oper:memory-statistics/memory-statistic
 source-vrf Mgmt-intf
 stream yang-push
 update-policy periodic 6000
```

The configuration commands are entered in CLI config mode to configure a static telemetry subscription on a Cisco IOS XE device. The commands are accepted by the device, but the consumer receives no telemetry dat a. Which change must be made to ensure that the consumer receives the telemetry data?

A. The IP address of the receiver must be set.
B. The stream type must be set to YANG.
C. The update policy period must be shortened.
D. The sender IP address must be set.

Correct Answer: A
Section:
Explanation:
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 51
Refer to the exhibit.



After executing the call, an engineer obtains the result of the Command Runner execution.

The three commands show as blocklisted in the downloaded file. What is the cause of the error?

A. The API user in Cisco DNA does not have write privileges on the devices.
B. The engineer attempting to access the devices in Cisco DNA Center does not have privilege 15.
C. The format of the JSON body must follow the CLI format.
D. Command Runner supports only the show command and the read-only command.

Correct Answer: D
Section:

QUESTION 52

```
module: Cisco-IOS-XE-interfaces-oper
  +--ro interfaces
     +--ro interface* [name]
        +--ro name                          string
        +--ro interface-type?               interfaces-ios-xe-oper:ietf-intf-type
        +--ro admin-status?                 interfaces-ios-xe-oper:intf-state
        +--ro oper-status?                  interfaces-ios-xe-oper:oper-state
        +--ro last-change?                  yang:date-and-time
        +--ro if-index?                     int32
        +--ro phys-address?                 yang:mac-address
        +--ro higher-layer-if*              string
        +--ro lower-layer-if*               string
        +--ro speed?                        uint64
        +--ro statistics
        |  +--ro discontinuity-time?    yang:date-and-time
        |  +--ro in-octets?             uint64
        |  +--ro in-unicast-pkts?       uint64
```

Refer to the exhibit. What is a characteristic of the tree?

A. three optional metrics
B. two leaf-lists
C. ten leaf-lists
D. three containers

Correct Answer: D
Section:

QUESTION 53
Refer to the exhibit.

```
import requests

url = "https://api.meraki.com/api/v1/networks/ENAUTO/devices/remove"

payload = '''{ "serial": "Q134-..........." }'''

headers = {
    "Content-Type": "application/json",
    "Accept": "application/json",
    "": "",
    "X-Cisco-Meraki-API-Key": "6bec40cf957de430a6f1f2012345678a4fac9ea0"
}

[                                                                    ]

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

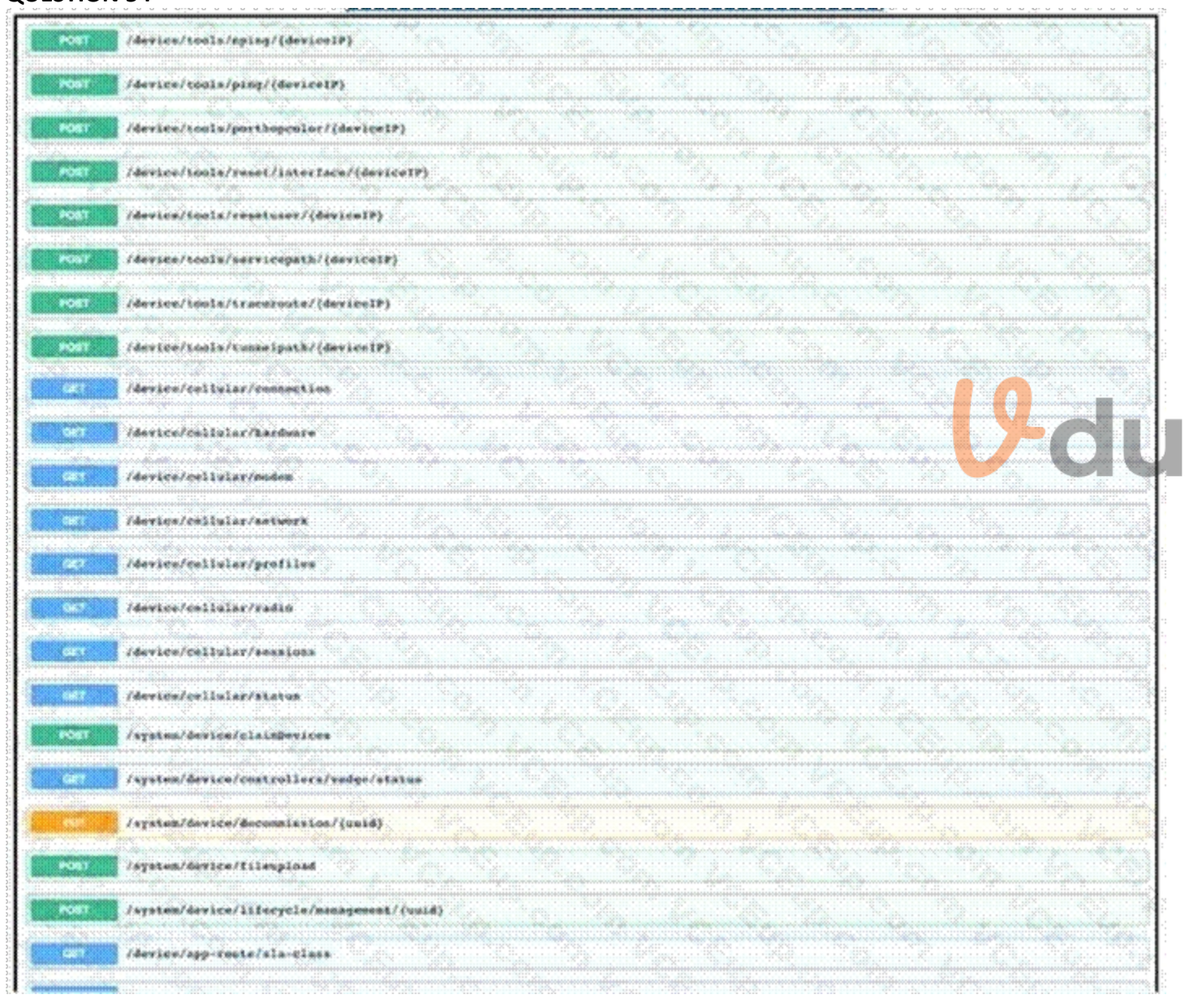
An engineer needs to remove the device with serialQ134_06776318 FROM THE NETWORK ‘ENAUTO by utilizing Meraki APIs. Which line of code must be added to the box where the code is

missing to complete the python request?

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

Correct Answer: A
Section:

QUESTION 54



Refer to the exhibit. End users cannot connect to the circular network, and the signal strength is poor.

A missing or unknown APN status message is present and the modern status remains in low-power mode. Which addresses the issue?

A. Use the device/celluiar/status vManage resource URI to ensure sufficient radio signal strength.
B. Use the systen/device/controllers vManage resource URI to set the platform temperature.
C. Use the device/app-route/statistics vManage resource URI to allow packets reachability to hosts.
D. Use the device/tools'ping vManage resource URI to allow network device reachability.

Correct Answer: D
Section:

QUESTION 55
In the Cisco DNA Center Operational Tool API, which section of the intent API allows the retrieval of keywords that are accepted by the CLI and enables the execution of read-only commands on network devices to retrieve their real- configuration?

A. Device Inventory
B. Command Runner
C. Network Assurance
D. Device Discovery

Correct Answer: D
Section:

QUESTION 56
On which device is the Cisco SD-WAN manage certificate management API able to install certificates?

A. CSR 1O00v
B. vFog router
C. load balancer
D. vSmart

Correct Answer: C
Section:

QUESTION 57
When working with MV Sense APLS , upon which type of protocol is MQTT based?

A. publish-subscribe messaging
B. simple mail transport
C. heavyweight messaging
D. computer vision

Correct Answer: A
Section:

QUESTION 58

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

data = OrderedDict([('ietf-interfaces:interface',
          OrderedDict([
                       ('name', 'Loopback2') ,
                       ('type', 'iana-if-type:softwareLoopback') ,
                       ('ietf-ip:ipv4',
                          OrderedDict([
                             ('address', [OrderedDict([
                                ('ip', '10.222.234.6'),
                                ('netmask', '255.255.255.0')
                             ])]
                             )
                          ])
                       ),
                    })
                 )])

response =
requests.put("https://10.10.20.48:443/restconf/data/ietf-interfaces:interfaces/interface=Loopback2",
             auth=("cisco", "cisco 1234!"),
             headers=headers,
             verify=False,
             json=data
             )
```

Refer to the exhibit. A Python script is used to configure a Cisco IOS XE router. The Loopback2 interface currently has a description of Management and an IP address/netmask of 10.222.34.22/32.

What is the result of executing the script?

A. The interface description remains the same.
B. The router rejects all commands, and the configuration remains the same.
C. The interface is removed from the configuration.
D. The interface description is removed from the configuration.

Correct Answer: A
Section:

QUESTION 59

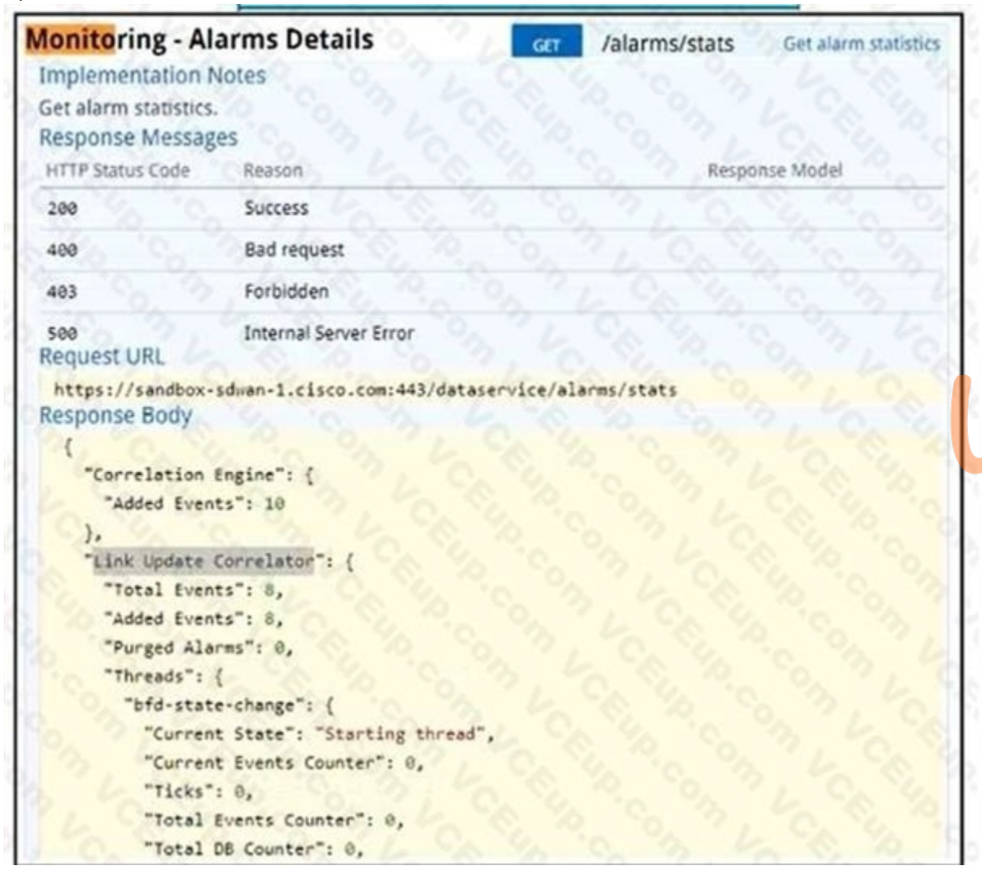
```
---
- name: reset lab
  hosts: lab
  gather_facts: no

  tasks:
  - name: task1
    ios_facts:
      gather_subset: all

  - name: task2
    ios_l3_interface:
      name: Loopback1
      state: absent
    when: '"pod-1" in ansible_net_hostname'

- name: task3
  ios_l3_interface:
    name: Loopback2
    state: absent
  when: '"pod-2" in ansible_net_hostname'
```

Refer to the exhibit. The lab group consists of four Cisco IOS XE routers named pod-11,pod-12, and pod-22. What is the result of running the Ansible playbook to reset the lab?

A. The IPv4 and IPv6 addresses for the Loopback1 interface are removed from pod-11 and pod-12.
B. The IPv4 and IPv6 addresses for the Loopback2 interface are removed from all routers.
C. The Loopback1 interface is removed from the pod-11 and pod-12 routers.
D. The changes will occur on pod-21 and pod-22 If the loopback2 Interface is absent.

Correct Answer: C
Section:

QUESTION 60



```
import requests, urllib3
import json

urllib3.disable_warnings()

url = "https://sandbox-sdwan-1.cisco.com"
headers = {"Content-Type": "application/x-www-form-urlencoded"}
credentials = {"j_username": "devnetuser", "j_password": "RG!_Yw919_83"}
cookie_response = requests.post(url + "/j_security_check", headers=headers,
data=credentials, verify=False)
```

Refer to the exhibit. An API request must display an alert message if change in OSPF neighbors is detected. Which code snippet must be added to complete the requests?

```
alarm stats = requests.post(url +
                "/dataservice/alarms/stats",
                cookies=cookie response.cookies,
                verify=False)
if alarm stats.status code == 200:
   if json.loads(alarm stats.text)['Link Update
   Correlator']['ospf-neighbor-state-change']
   ['Total Events Counter'] != 0:
        print('OSPF neighboor change detected!')
```

```
alarm stats = requests.post(url +
                "/dataservice/alarms/stats",
                cookies=cookie response.cookies,
                verify=False)
if alarm stats.status code == 200:
   if json.loads(alarm stats.text)['Link Update
   Correlator']['ospf-neighbor-state-change']
   ['Current State'] != 0:
        print('OSPF neighboor change detected!')
```

```
alarm stats = requests.post(url +
                "/dataservice/alarms/stats",
                cookies=cookie response.cookies,
                verify=False)
if alarm stats.status code == 200:
   if json.loads(alarm stats.text)
   ['Correlation Engine']
   ['ospf-neighbor-state-change']
   ['Current State'] != 0:
        print('OSPF neighboor change detected!')
```

```
alarm stats = requests.post(url +
                "/dataservice/alarms/stats",
                cookies=cookie response.cookies,
                verify=False)
if alarm stats.status code == 200:
   if json.loads(alarm stats.text)['Correlation
   Engine']['ospf-neighbor-state-change']
   ['Total Events Counter']  != 0:
        print('OSPF neighboor change detected!')
```

A. Option A

B. Option B
C. Option C
D. Option D

Correct Answer: A
Section:

QUESTION 61

```
<rpc-reply message-id="urn:uuid:5047f8f1-f911-403c-839d-2bbd5cf0bbeb" xmlns="urn:ietf:params:xml:ns:netconf:base:1.0">
        <data>
                <interfaces xmlns="urn:ietf:params:xml:ns:yang:ietf-interfaces">
                        <interface>
                                <name>GigabitEthernet1</name>
                                <description>MANAGEMENT INTERFACE - DON'T TOUCH ME</description>
                                <type xmlns:ianaift="urn:ietf:params:xml:ns:yang:iana-if-type">ianaift:ethernetCsmacd</type>
                                <enabled>true</enabled>
                                <ipv4 xmlns="urn:ietf:params:xml:ns:yang:ietf-ip">
                                        <address>
                                                <ip>10.10.20.48</ip>
                                                <netmask>255.255.255.0</netmask>
                                        </address>
                                </ipv4>
                                <ipv6 xmlns="urn:ietf:params:xml:ns:yang:ietf-ip"/>
                        </interface>
                </interfaces>
        </data>
</rpc-reply>
```

Refer to the exhibit. If the data included in the code was saved to a python variable named “example”. Which line of code converts if for praising?

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

Correct Answer: A
Section:

QUESTION 62
In which two use cases should a Python virtual environment be used? (choose two.)

A. When developing multiple Python projects in the same environment that have the same Python package version requirements.
B. When developing multiple Python projects in the same environment that have conflicting Python package versions.
C. When developing the same Python application across multiple systems using the same application requirements.
D. When creating a new project with several development environments in a multi-project development system across the infrastructure.
E. When creating a new project that has a clean development environment in a multi-project development system.

Correct Answer: B, D
Section:

QUESTION 63
What is a benefit software-defined networks when compared to traditional network?

A. They improve information capture from the network by enabling model-driven telemetry, whereas traditional networks use SNMP for capturing logs from devices.
B. They facilitate network management by replacing network services that run on dedicated hardware, whereas traditional networks use networking platforms to run and enforce policies.
C. They simplify operations by providing policy enforcement across physical and virtual environments, whereas traditional network configuration occurs on the physical infrastructure.
D. They reduce costs by enabling network functions to run on commodity servers, whereas traditional network functions run on physical servers.

Correct Answer: B
Section:

QUESTION 64

```
module interfaces {

  typedef dotted-quad {
    type string {
      pattern
        '(([0-9]|[1-9][0-9]|1[0-9][0-9]|2[0-4][0-9]|25[0-5])\.){3}'
          + '([0-9]|[1-9][0-9]|1[0-9][0-9]|2[0-4][0-9]|25[0-5])';
    }
    description
      "Four octets written as decimal numbers and
       separated with the '.' (full stop) character.";
  }

  container interfaces {
    list interface {
      key "name";
      leaf name {
        type string;
        mandatory "true";
        description
          "Interface name.";
      }
      leaf address {
        type dotted-quad;
        mandatory "true";
        description
          "Interface IP address.";
      }
      leaf subnet-mask {
        type dotted-quad;
        mandatory "true";
        description
          "Interface subnet mask.";
      }
      leaf enabled {
        type boolean;
        default "false";
        description
          "Enable or disable the interface.";
      }
    }
  }
}
```

Refer to the exhibit. What is a valid XML instances of this YANG module?

```
<data xmlns="urn:ietf:params:xml:ns:netconf:base:1.0">
  <interfaces xmlns="http://example.com/interfaces">
    <interface>
      <name>GigabitEthernet 0/0/0</name>
      <address>10.10.10.1</address>
      <subnet-mask>255.255.255.0</subnet-mask>
    </interface>
    <interface>
      <name>GigabitEthernet 0/0/1</name>
      <address>192.168.1.1</address>
      <subnet-mask>255.255.255.0</subnet-mask>
    </interface>
  </interfaces></data>
```

```
<data xmlns="urn:ietf:params:xml:ns:netconf:base:1.0">
  <interfaces xmlns="http://example.com/interfaces">
    <interface>
      <name>GigabitEthernet 0/0/0</name>
      <address>10.10.10.1</address>
      <enabled>true</enabled>
    </interface>
    <interface>
      <name>GigabitEthernet 0/0/1</name>
      <address>192.168.1.1</address>
      <subnet-mask>255.255.255.0</subnet-mask>
      <enabled>true</enabled>
    </interface></interfaces></data>
```

```
<data xmlns="urn:ietf:params:xml:ns:netconf:base:1.0">
  <interfaces xmlns="http://example.com/interfaces">
    <interface>
      <name>GigabitEthernet 0/0/0</name>
      <address> 2001:db8::2:1</address>
      <subnet-mask>255.255.255.0</subnet-mask>
    </interface>
    <interface>
      <name>GigabitEthernet 0/0/1</name>
      <address> 2001:db8::2:1</address>
      <subnet-mask>255.255.255.0</subnet-mask>
    </interface>
  </interfaces></data>
```

```
<data xmlns="urn:ietf:params:xml:ns:netconf:base:1.0">
  <interfaces xmlns="http://example.com/interfaces">
    <interface>
      <address>10.10.10.1</address>
      <subnet-mask>255.255.255.0</subnet-mask>
    </interface>
    <interface>
      <address>192.168.1.1</address>
      <subnet-mask>255.255.255.0</subnet-mask>
    </interface>
  </interfaces>
</data>
```

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

Correct Answer: A
Section:

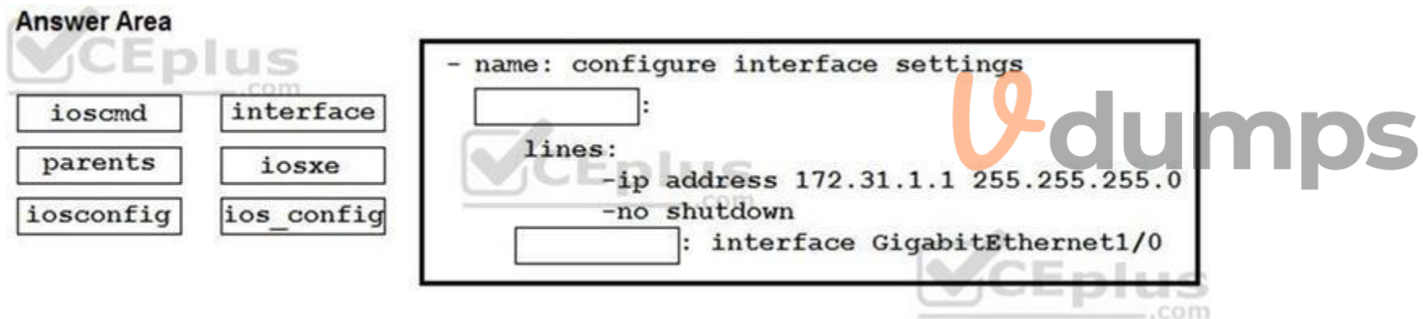
QUESTION 65
When API request are implement for Cisco DNA Centre, which two response are returned in the JSON response when HTTP GET call is made to obtain site health? (choose two)

A. clientHealthWired
B. clientHealthAverage
C. totalApplicationCount
D. routerGoodCount
E. overallBadDevices

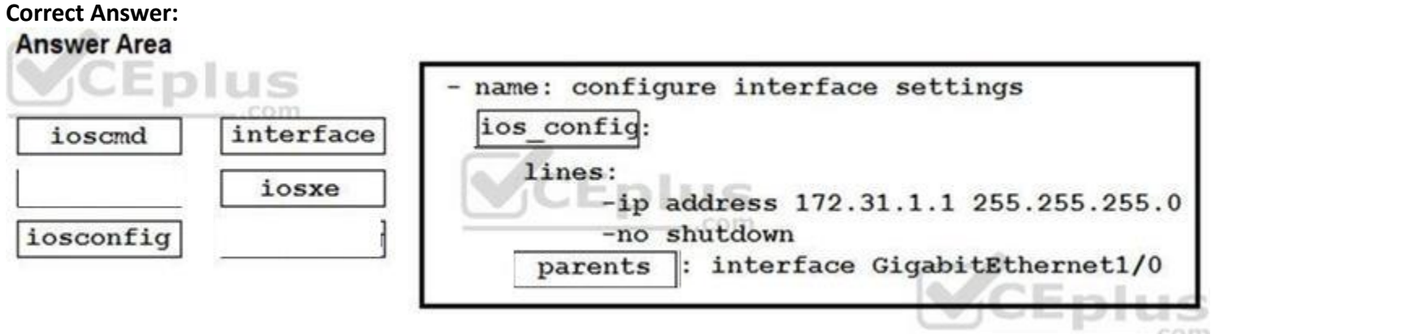
Correct Answer: A, D
Section:

QUESTION 66
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:



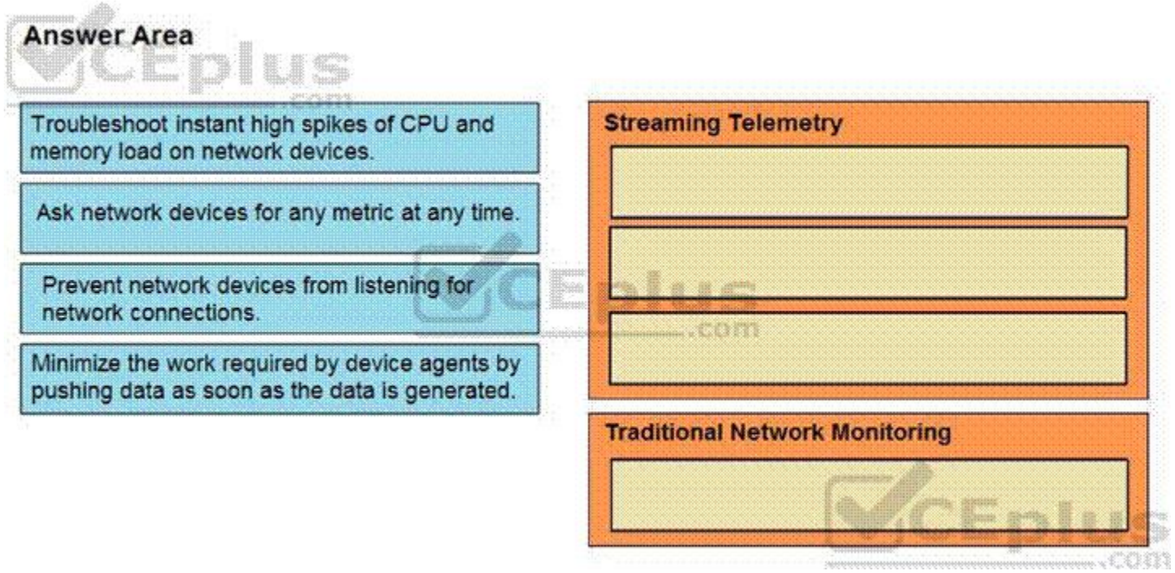
Correct Answer:



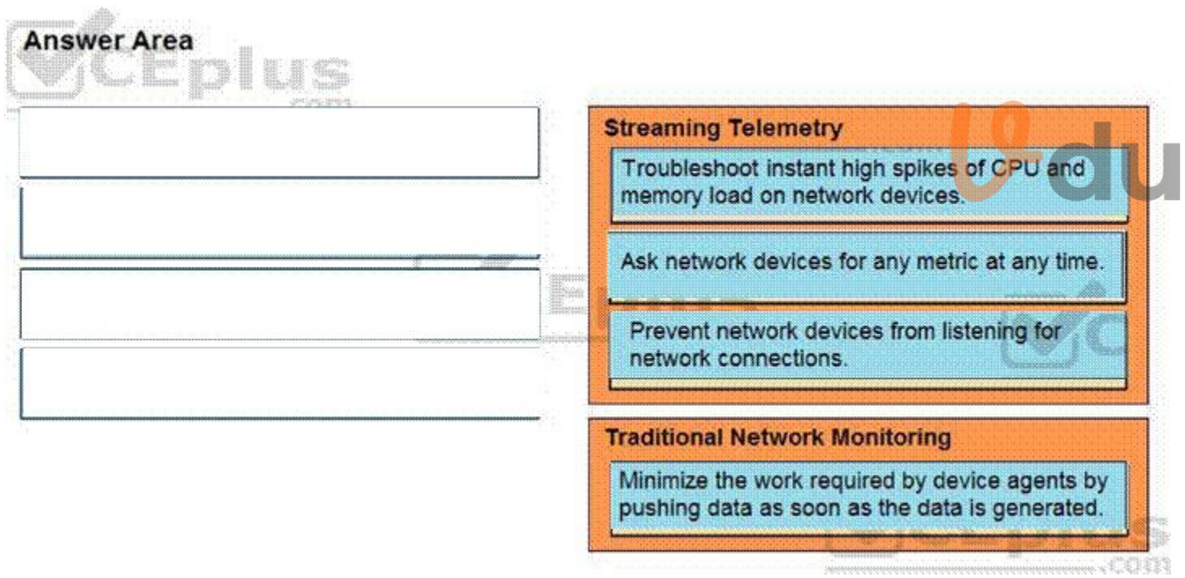
Section:
Explanation:

QUESTION 67
DRAG DROP
Drag and drop the characteristic from the left onto the monitoring type described on the right.

Select and Place:



Correct Answer:



Section:
Explanation:
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 68
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:
Explanation:
Reference: https://developer.cisco.com/docs/dna-center/#!using-id-values-in-rest-requests

QUESTION 69
DRAG DROP

```
GET: https://dnacsrv/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": "FCW2136L0AK",
        "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.

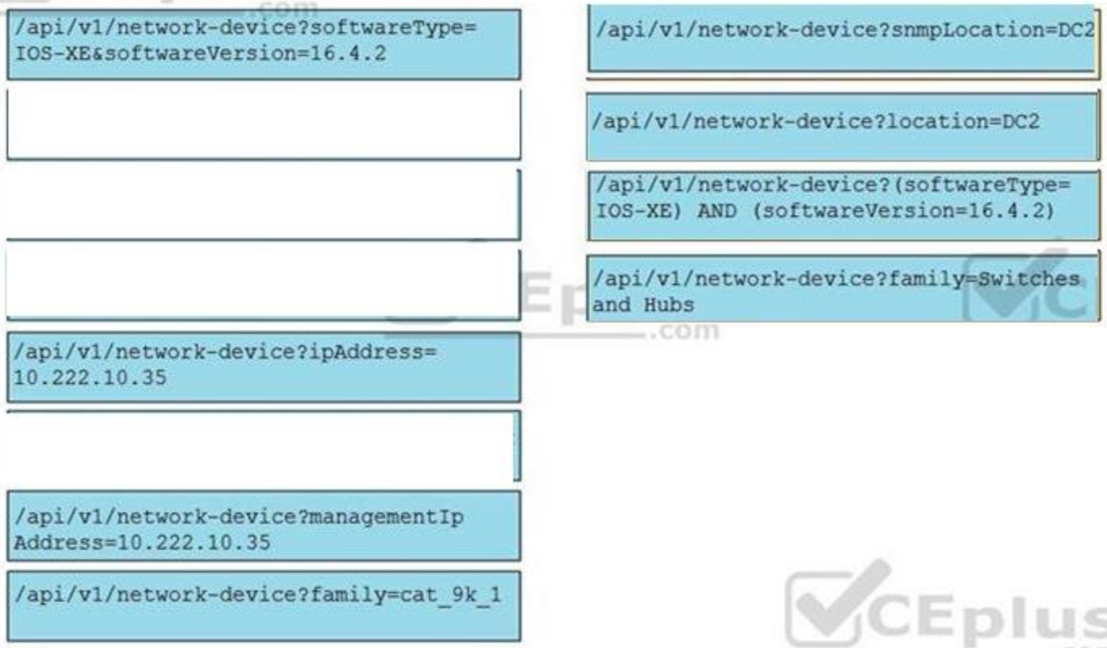
Select and Place:

Answer Area

/api/v1/network-device?softwareType=IOS-XE&softwareVersion=16.4.2	List devices that are configured by using SNMP to be in the DC2 location
/api/v1/network-device?location=DC2	List device types
/api/v1/network-device?(softwareType=IOS-XE) AND (softwareVersion=16.4.2)	List the device that has an IP address of 10.222.10.35
/api/v1/network-device?family=Switches and Hubs	Display Cisco IOS XE devices that have IOS version 16.4.2
/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	

Correct Answer:

Answer Area



Section:

Explanation:

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

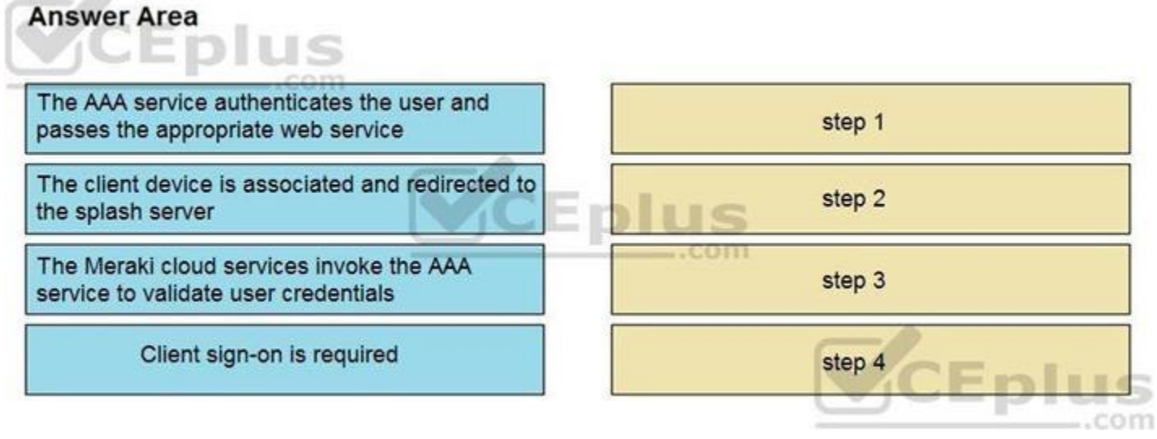
QUESTION 70

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



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:
Explanation:

QUESTION 71
DRAG DROP

```
$ pyang -f tree ietf-interfaces.yang
module: ietf-interfaces
  +--rw interfaces
  |  +--rw interface* [name]
  |     +--rw name                        string
  |     +--rw description?                string
  |     +--rw type                        identityref
  |     +--rw enabled?                    boolean
  |     +--ro statistics
  |        +--ro discontinuity-time    yang:date-and-time
  |        +--ro in-unicast-pkts?      yang:counter64
  |        +--ro in-broadcast-pkts?    yang:counter64
  x--ro interfaces-state
     x--ro interface* [name]
        x--ro name                string
        x--ro type                identityref
        x--ro admin-status        enumeration {if-mib}?
        x--ro oper-status         enumeration
        x--ro statistics
           x--ro discontinuity-time    yang:date-and-time
           x--ro in-octets?            yang:counter64
           x--ro in-unicast-pkts?      yang:counter64
```

Refer to the exhibit. Drag and drop the code from the bottom onto the box where the code is missing to complete the ncclient request that captures the operational data of the interfaces of a Cisco IOS XE device. Options may be used once, more than once, or not at all.

Select and Place:

```
from ncclient import manager
import xml.dom.minidom

USERNAME = 'cisco'
PASSWORD = 'cisco'
HOST = '10.10.20.181'

data = '''
    <  [          ]  xmlns="urn:ietf:params:xml:ns:yang:ietf-interfaces">
       <  [          ]  >
          <statistics></statistics>
       </ [          ]  >
    </ [          ]  >
'''

with manager.connect(host=HOST, password=PASSWORD, port=830, username=USERNAME,
                     hostkey_verify=False, device_params={'name':'iosxe'}) as m:
    c = m.get(filter(" [          ] ", data)).data_xml
    xml = xml.dom.minidom.parseString(c)
    xml_pretty_str = xml.toprettyxml()
    print(xml_pretty_str)
```

interfaces-state	interface-state	interfaces
xpath	subtree	interface

Correct Answer:

```
from ncclient import manager
import xml.dom.minidom

USERNAME = 'cisco'
PASSWORD = 'cisco'
HOST = '10.10.20.181'

data = '''
    < interface-state  xmlns="urn:ietf:params:xml:ns:yang:ietf-interfaces">
       < xpath >
          <statistics></statistics>
       </ interface >
    </interface-state >
'''

with manager.connect(host=HOST, password=PASSWORD, port=830, username=USERNAME,
                     hostkey_verify=False, device_params={'name':'iosxe'}) as m:
    c = m.get(filter=(" subtree ", data)).data_xml
    xml = xml.dom.minidom.parseString(c)
    xml_pretty_str = xml.toprettyxml()
    print(xml_pretty_str)
```

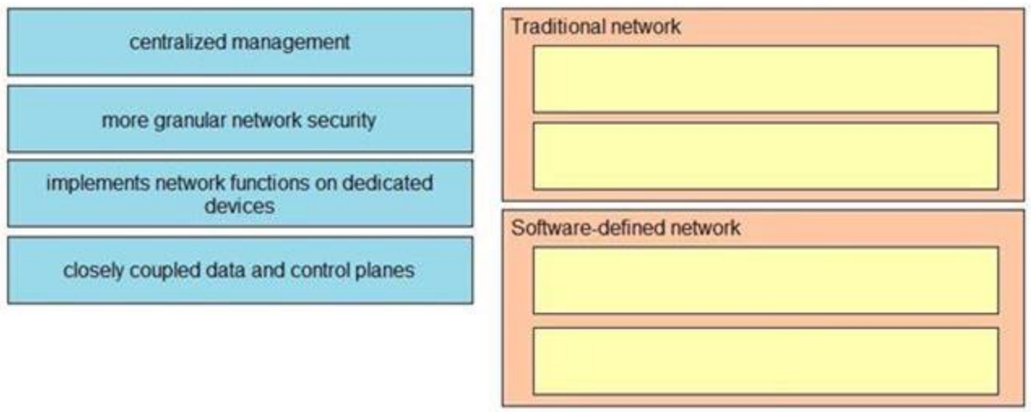
interfaces-state	interface-state	interfaces
xpath	subtree	interface

Section:
Explanation:

QUESTION 72
DRAG DROP
Drag and drop the characteristics from the left onto the network types on the right.

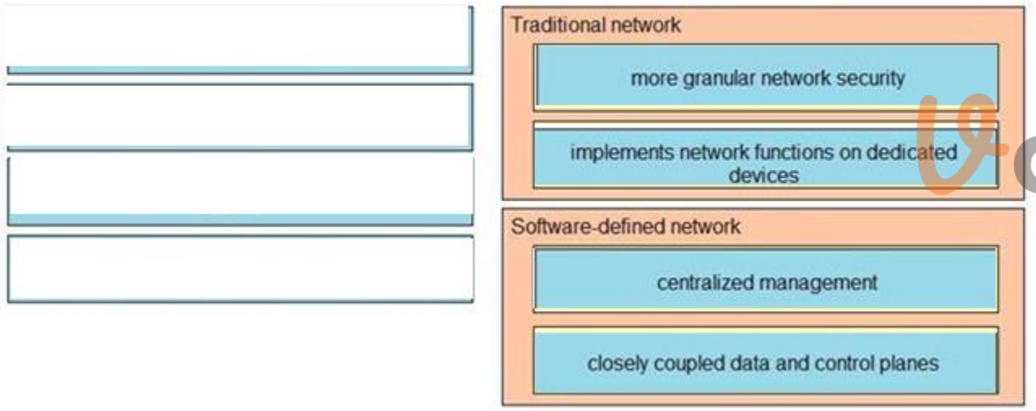
Select and Place:

Answer Area



Correct Answer:

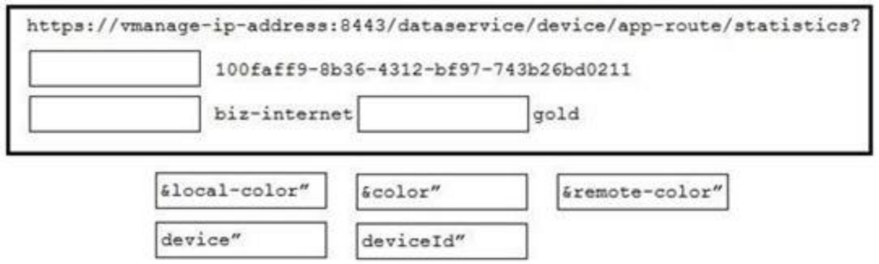
Answer Area



Section:
Explanation:

QUESTION 73
DRAG DROP
Drag and drop the code from the bottom onto the box where the code is missing to complete this API request against the Cisco SD-WAN vManage Statistics API, which specifies a device with an Id of 100faff9-8b36-4312-bf97-
743b26bd0211, a local color of biz-internet, and a remote color of gold. Not all options are used.

Select and Place:



Correct Answer:

Section:
Explanation: