

## Cisco 300-435 Exam Preparation Materials

Vendor: Cisco

Exam Code: 300-435

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

Certification: Cisco

Single & Multiple Choice: 107

Drag Drop: 15

Total Questions: 122 Q&A ([View Details](#))

Updated on: Jan 23, 2026

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### Question 1:

Refer to the exhibit.

```
module interfaces {  
    typedef dotted-quad {  
        type string {  
            pattern  
                '(([0-9]|1[0-9]|0[0-9])\\([0-9]|1[0-9]|0[0-9])\\([0-9]|1[0-9]|0[0-9])\\([0-9]|1[0-9]|0[0-9])\\([0-5])\\.)\\{3}'  
                + '(([0-9]|1[0-9]|0[0-9])\\([0-9]|1[0-9]|0[0-9])\\([0-9]|1[0-9]|0[0-9])\\([0-9]|1[0-9]|0[0-9])\\([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.";  
            }  
        }  
    }  
}
```

What is a valid XML instances of this YANG module?

① <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>

② <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>

③ <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>

④ <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

**Question 2:**

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

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](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)

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**Question 3:**

DRAG DROP

```
$ pyang -f tree ietf-interfaces.yang
module: ietf-interfaces
  +-rw interfaces
    |  +-rw interface* [name]
    |    +-rw name                      string
    |    +-rw description?
    |    +-rw type                      identityref
    |    +-rw enabled?
    |    +-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 = '''

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

with manager.connect(host=HOST, password=PASSWORD, port=830, username=USERNAME,
                     hostkey_verify=False, device_params={'name': 'iosxe'}) as m:
    c = m.get(filter=[REDACTED], data_xml)

    xml = xml.dom.minidom.parseString(c)
    xml_pretty_str = xml.toprettyxml()
    print(xml_pretty_str)

```

[REDACTED] interfaces-state

[REDACTED] interface-state

[REDACTED] interfaces

[REDACTED] xpath

[REDACTED] subtree

[REDACTED] interface

Correct Answer:

```

from ncclient import manager
import xml.dom.minidom

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

data = '''

< interfaces-state xmlns="urn:ietf:params:xml:ns:yang:ietf-interfaces">
    < xpath >
        <statistics></statistics>
    </ interface >
</ interfaces-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.dom.minidom.parseString(c)
    xml_pretty_str = xml.toprettyxml()
    print(xml_pretty_str)

```

interfaces-state

interface-state

interfaces

xpath

subtree

interface

#### Question 4:

When working with MV Sense APIs, which type of protocol is MQTT based upon?

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

Correct Answer: A

Reference:

<https://internetofthingsagenda.techtarget.com/definition/MQTT-MQ-Telemetry-Transport>

**Question 5:**

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

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

---

**Question 6:**

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

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

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**Question 7:**

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

Reference:

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

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**Question 8:**

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

Reference:

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

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**Question 9:**

```
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>1</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>
```

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

Reference:

[https://www.cisco.com/c/en/us/td/docs/ios-xml/ios/prog/configuration/166/b\\_166\\_programmability\\_cg/restconf\\_prog\\_int.pdf](https://www.cisco.com/c/en/us/td/docs/ios-xml/ios/prog/configuration/166/b_166_programmability_cg/restconf_prog_int.pdf)

**Question 10:**

```
# 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  
Logging 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

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

Correct Answer: D

**Question 11:**

```
{  
  "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

The double-quotations are a necessary syntax of Python. And for the json portion doesn't use parentheses. It always uses brackets. `d["data"][0]["host-name"]` is the only logical answer.

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#### Question 12:

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

---

**Question 13:**

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

Reference:

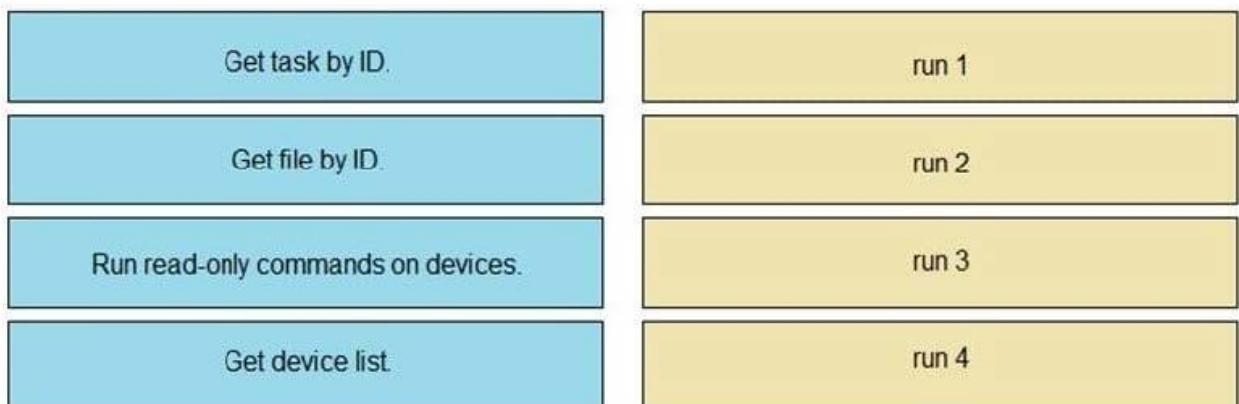
<https://developer.cisco.com/docs/dna-center/#/device-provisioning/endpoints-and-methods-used>

**Question 14:**

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**

Correct Answer:

## Answer Area

Run read-only commands on devices.

Get device list

Get file by ID.

Get task by ID.

Reference:

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

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### Question 15:

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