

Exam	300-535 Exam
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Sections

1. 1.0 Network Programmability Foundation
2. 2.0 Automation APIs and Protocols
3. 3.0 Network Device Programmability
4. Automation and Orchestration Platforms

QUESTION 1**DRAG DROP**

Drag and drop the steps from the left into the correct order on the right to deploy an already created service into NSO. Not all options are used.

Select and Place: **images not available**

Correct **images not available**

Answer: **images not available**

Section: 1.0 Network Programmability Foundation Explanation

Explanation/Reference:

Reference: <https://www.ciscolive.com/c/dam/r/ciscolive/emea/docs/2019/pdf/LABSPG-2442.pdf>

QUESTION 2

What tool is used to perform a “what if” failure analysis in a service provider network that is running Segment Routing?

- A. Cisco WAN Automation Engine
- B. Cisco Evolved Programmable Network Manager
- C. Cisco Network Services Orchestrator
- D. Cisco Segment Routing Path Computation Element

Answer: A

Section: 1.0 Network Programmability Foundation Explanation

Explanation/Reference:

Reference: <https://www.cisco.com/c/en/us/products/routers/wan-automation-engine/index.html>

QUESTION 3

```
curl --request DELETE --url http://10.1.1.1:8080/srpolicy-install --header 'cache-control: no-cache' --
header 'content-type: application/json'
--data '{"source": "1.1.1.2", "end-point": "2001:4860::1:1:1:1", "color": 99, "route-distinguisher": 2}'
<!DOCTYPE html>
<html>
<head>
<title>404 Not Found</title>
</head>
<body>
<h1>Not Found</h1>
<hr>
<address> Server at localhost:8080 </address>
</body>
</html>
```

Refer to the exhibit.

An engineer implements an automation with Cisco XTC. Which problem results in the 404 Not Found error code on the REST call?

- A. The resource that you are trying to delete does not exist.
- B. Port 8080 is not enabled on XTC.
- C. XTC does not offer any APIs.
- D. You must change the request method.

Answer: B

Section: 1.0 Network Programmability Foundation Explanation

Explanation/Reference:

QUESTION 4

Which two Python libraries are used to write a script to retrieve network device information using RESTCONF? (Choose two.)

- A. PySNMP
- B. requests
- C. ncclient
- D. YANG
- E. json

Answer: B,E

Section: 1.0 Network Programmability Foundation Explanation

Explanation/Reference:

QUESTION 5

Which command configures the remote peer when the Cisco IOS XR Traffic Controller is used?

- A. peer-sync ipv4 192.168.0.3
- B. state ipv4 192.168.0.3
- C. peer ipv4 192.168.0.3
- D. state-sync ipv4 192.168.0.3

Answer: D

Section: 1.0 Network Programmability Foundation Explanation

Explanation/Reference:

Reference: https://www.cisco.com/c/en/us/td/docs/routers/asr9000/software/asr9k-r6-2/segment-routing/configuration/guide/b-segment-routing-cg-asr9000-62x/b-seg-routing-cg-asr9000-62x_chapter_01001.html

QUESTION 6

An automation engineer is trying to configure a destination group to use dial-out telemetry with gRPC on a Cisco IOS XR platform. The template created is failing to apply. Which parameters must be configured?

- A. source IP address, source port, encoding, and sampling interval
 - B. source IP address, source port, encoding, and protocol
 - C. destination IP address, destination port, encoding, and sensor path
 - D. destination IP address, destination port, encoding, and protocol
-

Answer: D

Section: 1.0 Network Programmability Foundation Explanation

Explanation/Reference:

Reference: https://www.cisco.com/c/en/us/td/docs/iosxr/asr9000/telemetry/b-telemetry-cg-asr9000-61x/b-telemetry-cg-asr9000-61x_chapter_010.html

QUESTION 7

Which two use cases are valid for Cisco WAN Automation Engine? (Choose two.)

- A. deployment of SR policies
- B. integration with Cisco XTC
- C. what-if analysis
- D. device manager
- E. network controller

Answer: A,B

Section: 2.0 Automation APIs and Protocols Explanation

Explanation/Reference:

Reference: <https://www.ciscolive.com/c/dam/r/ciscolive/apjc/docs/2018/pdf/BRKSPG-2008.pdf> Slide 16

QUESTION 8

Refer to the exhibit.

```
- name: configure global bgp as 65000
  iosxr_bgp:
    bgp_as: 65000
    router_id: 1.1.1.1
    neighbors:
      - neighbor: 182.168.10.1
        remote_as: 500
        description: PEER_1
      - neighbor: 192.168.20.1
        remote_as: 500
        update_source: GigabitEthernet 0/0/0/0
  address_family:
    - name: ipv4
      cast: unicast
      networks:
        - network: 192.168.2.0/23
        - network: 10.0.0.0/8
      redistribute:
        - protocol: ospf
          id: 400
          metric: 110
```

What is the result of the Ansible task?

- A. It configures a Cisco IOS XR router with BGP AS65000 with two neighbors and redistributes OSPF into BGP.
- B. It validates the BGP configuration on a Cisco IOS XR router, but it is a read-only module and cannot modify the configuration on the router.
- C. It validates the BGP configuration on a Cisco IOS XE router, but it is a check mode-only network module and cannot modify the configuration on the router.
- D. It configures a Cisco IOS router with BGP on AS500 and redistributes OSPF into BGP.

Answer: A

Section: 2.0 Automation APIs and Protocols Explanation

Explanation/Reference:

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

QUESTION 9

Which schema allows device configuration elements to be enclosed within a remote procedure call message when NETCONF is implemented?

- A. JSON-RPC
- B. XML
- C. YAML
- D. JSON

Answer: B

Section: 2.0 Automation APIs and Protocols Explanation

Explanation/Reference:

Reference:

<https://books.google.com/books?id=jWVsAQAAQBAJ&pg=PA21&lpg=PA21&dq=schema+allows+device+configuration+elements+to+be+enclosed+within+a+remote+procedure+call+message+when+NETCONF+is+implemented&source=bl&ots=mcS25iO8ec&sig=ACfU3U08SQUN0Y7L2-An37GjHRqBzLGFUA&hl=en&sa=X&ved=2ahUKEwir16OF4dbpAhV7GjQIHc64B5kQ6AEwAHoECAoQAQ#v=onepage&q=schema%20allows%20device%20configuration%20elements%20to%20be%20enclosed%20within%20a%20remote%20procedure%20call%20message%20when%20NETCONF%20is%20implemented&f=false>

QUESTION 10

What is a key feature of YANG?

- A. use identification
- B. error prediction
- C. JAVA compatibility
- D. reusable types and groupings

Answer: D

Section: 2.0 Automation APIs and Protocols Explanation

Explanation/Reference:

Reference:

https://www.cisco.com/c/en/us/td/docs/optical/ncs1000/60x/b_Datamodels_cg_ncs1000/b_Datamodels_cg_ncs1000_chapter_00.html

QUESTION 11

What are two characteristics of the NFV architecture approach? (Choose two.)

- A. It decouples the network functions from proprietary hardware appliances.
- B. It provides 70% more efficiency of network infrastructure.
- C. It is specially designed for Internet providers.
- D. It is specially designed for telecommunications service providers.
- E. It typically includes a hypervisor.

Answer: A,E

Section: 2.0 Automation APIs and Protocols Explanation

Explanation/Reference:

Reference: <https://www.ciscolive.com/c/dam/r/ciscolive/us/docs/2016/pdf/LTRSPM-2022.pdf>

QUESTION 12

A Cisco NSO service has just been deployed. Which Cisco NSO CLI command is used to inspect the resulting device configuration changes before the changes are pushed to the network?

- A. show service impact
- B. commit dry-run outformat native
- C. pseudo-commit
- D. show dry-run output

Answer: B

Section: 2.0 Automation APIs and Protocols

Explanation

Explanation/Reference:

QUESTION 13

Refer to the exhibit.

```
RP/0/RP0/CPU0:XR_CORE666#conf t
Fri May 19 10:45:31.136 UTC
RP/0/RP0/CPU0:XR_CORE666(config)#pce
RP/0/RP0/CPU0:XR_CORE666(config-pce)#address ipv4 10.10.0.15
RP/0/RP0/CPU0:XR_CORE666(config-pce)#commit
```

XTC has been configured by an engineer. What does the IPv4 address represent on the snippet?

- A. local address of the router on which it listens for PCEP
- B. configured for the local peer for state synchronization
- C. destination address of the router on which it listens for PCEP
- D. configured for the remote peer for state synchronization

Answer: A

Section: 2.0 Automation APIs and Protocols Explanation

Explanation/Reference:

Reference: <http://ipnetworkgeek.blogspot.com/2017/05/path-disjointness-with-ios-xr-traffic.html>

QUESTION 14

An engineer is deploying a Python script to manage network devices through SSH. Which library based on Paramiko is used?

- A. sshmiko
- B. paramiko.agent
- C. libssh2
- D. netmiko

Answer: D

Section: 2.0 Automation APIs and Protocols Explanation

Explanation/Reference:

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

QUESTION 15

Refer to the exhibit.

```
from ydk.services import CRUDService
from ydk.providers import NetconfServiceProvider
from ydk.models.cisco_ios_xr import Cisco_IOS_XR_shellutil_oper \
    as xr_shellutil_oper
from datetime import timedelta

if __name__ == "__main__":
    """Main execution path"""
    provider = NetconfServiceProvider(address="10.0.0.1",
                                     port=830,
                                     username = "admin",
                                     password = "admin",
                                     protocol = "ssh")

    crud = CRUDService()
    system_time = xr_shellutil_oper.SystemTime()
    system_time = crud.read(provider, system_time)
    print("System uptime is" +
          str(timedelta(seconds=system_time.uptime)))
    exit()
```

Regarding the Python script using YDK, what is the result for a device that is running Cisco IOS XR Software?

- A. retrieves the system time
- B. configures the system time
- C. prints the uptime of the CRUDService

D. prints the system uptime

Answer: D

Section: 2.0 Automation APIs and Protocols Explanation

Explanation/Reference:

QUESTION 16

What is a benefit of Ansible for automating IOS XE or IOS XR platforms?

- A. Playbooks can be written in XML format.
- B. It has agent support
- C. It supports asynchronous orchestration.
- D. It offers native orchestration support for Cisco platforms.

Answer: D

Section: 2.0 Automation APIs and Protocols Explanation

Explanation/Reference:

QUESTION 17

An engineer must change from using NETCONF for streaming telemetry to telemetry data using gRPC framework because NETCONF uses XML for message and payload encoding.

Which two messages and payload encodings does gNMI use? (Choose two.)

- A. gNMI notifications with XML
- B. protobuf notifications with XML
- C. protobuf payload
- D. JSON payload
- E. gNMI notifications with JSON

Answer: C,E

Section: 2.0 Automation APIs and Protocols Explanation

Explanation/Reference:

Reference:

https://books.google.com/books?id=4AqXDwAAQBAJ&pg=PT131&lpg=PT131&dq=messages+and+payload+encodings+does+gNMI+use&source=bl&ots=81hpFjIZ_9&sig=ACfU3U1EAEwjRMBnCiHNESBwFLHvZDHkBw&hl=en&sa=X&ved=2ahUKewjirNeZptfpAhXDoFsKHeqMBFsQ6AEwBHoECAsQAQ#v=onepage&q=messages%20and%20payload%20encodings%20does%20gNMI%20use&f=false

QUESTION 18

Which two commands generate a template using Cisco NSO to build a service package? (Choose two.)

- A. show running-config devices device ce-ios config ios:interface Loopback 0 | display template.xml
- B. show running-config devices device ce-ios config ios:interface Loopback 0 | display xml | save template.xml
- C. request running-config devices device ce-ios config ios:interface Loopback 0 | display xml
- D. show running-config devices device ce-ios config ios:interface Loopback 0

E. show running-config devices device ce-ios config ios:interface Loopback 0 | display xml

Answer: A,C

Section: 2.0 Automation APIs and Protocols Explanation

Explanation/Reference:

QUESTION 19

When using Cisco YDK, which syntax configures the BGP ASN using OpenConfig BGP?

- A. `bgp.config.as_ = 65000`
- B. `bgp.global_.config.as = 65000`
- C. `bgp.global.config.as_ = 65000`
- D. `bgp.global_.config.as_ = 65000`

Answer: D

Section: 2.0 Automation APIs and Protocols Explanation

Explanation/Reference:

Reference: <https://www.ciscolive.com/c/dam/r/ciscolive/emea/docs/2019/pdf/BRKNMS-2032.pdf>

QUESTION 20

An engineer wants to replace the BLOCK_BAD ACL on the Cisco IOS XE router with this new content. The engineer wants to use RESTCONF for this and constructs a PUT request to the resource `/restconf/data/native/ip/access-list/Cisco-
IOS-XE-acl:extended=BLOCK_BAD`. What must the body look like to achieve the Cisco IOS XE configuration?

Desired configuration:

```
ip access-list extended BLOCK_BAD permit ip any host 192.168.20.1 deny ip any any
```

A.