### Practice Exam Questions



300-915

Developing Solutions Using Cisco loT and Edge Platforms (DEVIOT)



## Cisco

### Exam 300-915

# Developing Solutions Using Cisco IoT and Edge Platforms (DEVIOT)

Version: 3.0

[ Total Questions: 60 ]

#### **Question No:1**

A network is being configured for an Ethernet-connected sensor. The sensor fails to send data to the configured destination. The IP address of the sensor can be pinged from a laptop on the same subnet. When a different subnet is used, the sensor cannot be reached, but other clients on the same subnet are still accessible.

What are two reasons for the connectivity problem? (Choose two.)

- A. wrong DNS server on the sensor
- B. wrong subnet mask on your laptop
- C. wrong default gateway on the sensor
- **D.** wrong default gateway on your laptop
- E. wrong subnet mask on the sensor

Answer: C,E

#### **Question No: 2**

Mosquitto was installed correctly on the Cisco IR829 router as a Cisco IOx application. When the sensor is connected to the broker on the Cisco IR829 router with the default port, the connection is refused (Error Code 5).

Which action should be done to resolve the issue?

- **A.** Insert in the IOS config: ip nat inside source static tcp <CAF IP> 1883 interface GigabitEthernet0 1883
- **B.** Insert in the package\_config.ini file under section ports: tcp: ["8883"]
- **C.** Use the correct username and password.
- **D.** Insert in the package.yaml file under section ports: tcp: ["1883"]

**Answer: C** 

#### **Question No: 3**

When trying to subscribe to an MQTT broker on the internet, the MQTT client is on a private subnet and must be NATed to reach the public broker.

What is the expected outcome when this configuration is in place?

- **A.** The client periodically reconnects to the default gateway.
- **B.** The client connects only once using the PENDING message to the broker.
- **C.** The client periodically reconnects to the broker over the NAT connection.
- **D.** The client connects only once using the CONNECT massage to the broker.

**Answer: D** 

#### **Question No: 4**

Refer to the exhibit.

The code and the error message that are received when the code is run is presented. What causes issues authenticating with Cisco GMM API using the web-generated API key?

- A. firewall that blocks authentication ports
- B. incorrect username and password
- C. incorrect GMM Cluster selection
- **D.** incorrect key size and data encryption

**Answer: B** 

#### **Question No:5**

#### Cisco 300-915: Practice Test

FROM devhub-docker.cisco.com/iox-docker/ir800/base-rootfs:latest

RUN opkg update && opkg install python

COPY sample.py /usr/bin/sample.py

CMD /usr/bin/sample.py

Which line of code completes the Dockerfile?

- A. RUN chmod 777 /usr/bin/sample.py
- B. RUN chown root:root /usr/bin/sample.py
- C. WORKDIR /usr/bin
- D. USER root

**Answer: A** 

**Question No: 6** 

```
"set1": {
"Source.IP": "192.168.0.52",
"Source.Port": 443,
"Destination.IP": "192.168.0.55",
"Destination.Port": 44447,
"Protocol": 6,
"Timestamp": "07/10/201911:12:20",
"Flow.Duration": "131",
"Total.Fwd.Packets": "8"
1,
"set2": {
"Source.IP": "192.168.0.48",
"Source.Port": 80,
"Destination.IP": "192.168.0.49",
"Destination.Port": 5000,
"Protocol": 6,
"Timestamp": "07/10/201911:12:20"
"Flow.Duration": "246",
"Total.Fwd.Packets": "21"
},
"set3": {
"Source.IP": "192.168.5.50",
"Source.Port": 8000,
"Destination.IP": "10.0.0.91",
"Destination.Port": 8000,
"Protocol": 6,
"Timestamp": "07/10/201911:12:20",
"Flow.Duration": "567",
"Total.Fwd.Packets": "321"
"set4": "Output shorted..."
```

The code snippet provides information about the packet captures within a network. How can the most used source IP addresses within a specific time be visualized?

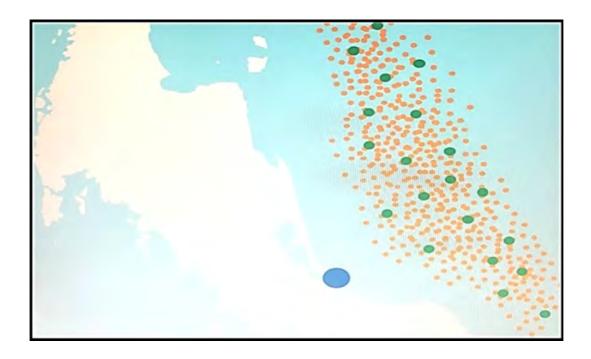
- A. line graph
- B. bar histogram

- C. scatter plot
- D. heatmap

**Answer: B** 

#### Question No: 7

Refer to the exhibit.



Approximately 4000 oil platforms, each with 400 sensors, are spread in the Gulf of Mexico and all of their data must come together into one dashboard. Which general architecture should be selected to connect them?

A. 4-tier: sensor – edge device (Intel Atom CPU) – fog device (Intel Xeon CPU) – cloud

**B.** 5-tier: intelligent sensor– edge device (Intel Atom CPU) – fog device (Intel Xeon CPU) – edge data center (Intel Xeon CPU)

C. 2-tier: intelligent sensor – cloud

**D.** 3-tier: sensor – edge device (Intel Atom CPU) – cloud

#### **Answer: B**

Reference: https://www.itu.int/en/ITU-D/Regional-

Presence/Africa/Documents/Internet%20of%20Things%20-

%20Cisco%27s%20Vision%20and%20Approach.pdf

#### **Question No:8**

Which command is used to package a Docker-style Cisco IOx app using ioxclient?

- A. ioxclient docker create helloworld:1.0.
- **B.** ioxclient docker-app helloworld:1.0.
- C. ioxclient docker package helloworld:1.0.
- **D.** ioxclient docker helloworld:1.0.

**Answer: C** 

#### **Question No:9**

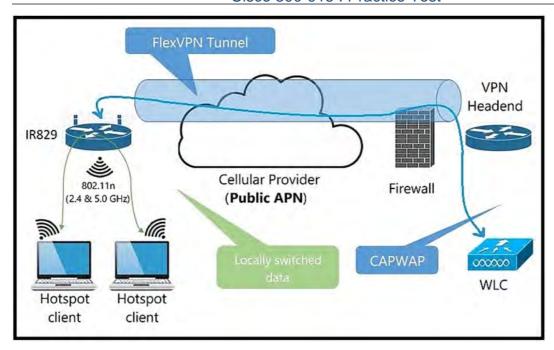
An IOx application is installed via Local Manager. Every time the application is started, it instantly stops.

Which troubleshooting steps should be taken?

- **A.** There is something wrong with the application code itself.
- **B.** Check the startup and entrypoint parameters.
- **C.** Give the IOx application more CPU units.
- **D.** Check local IOx settings, especially the network settings.

**Answer: C** 

**Question No: 10** 

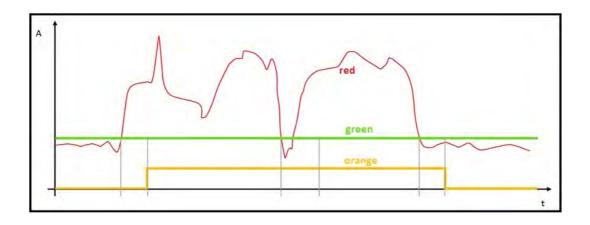


Which protocol is used to make a FlexVPN connection from a Cisco IR829 router to a headend router?

- A. SSL
- **B.** IKEv2
- C. NAT
- D. IS-IS

#### **Answer: B**

#### **Question No: 11**



#### Cisco 300-915: Practice Test

The graph has been provided by the monitoring team to the IoT Engineer. The red line represents the consumption of energy from an industrial machine.

Which two pieces of information can be captured? (Choose two.)

- **A.** The green graph visualizes the mean value of the data points.
- **B.** The green graph visualizes if the electronic device is not in stand-by mode.
- C. The orange graph visualizes a boolean: power on/off.
- **D.** The orange graph contains more information than the red graph.

Answer: A,C

#### **Question No: 12**

Which two states are applications expected to be seen in when they are managed on Cisco IOx? (Choose two.)

- A. DEACTIVATED
- **B.** ACTIVATED
- C. ALLOWED
- D. STOPPED
- E. VALIDATED

Answer: B,D

#### **Question No: 13**

Which two security approaches help build a strong authentication scheme? (Choose two.)

- A. connection based on location
- B. session IDs accepted only from cookies
- C. maximum allowed connections
- **D.** user logout
- **E.** session logout because of inactivity

Answer: C,E