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400-007

Cisco Certified Design Expert

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Exam 400-007

Cisco Certified Design Expert

Version: 5.0

[Total Questions: 266]

Question No : 1

You are designing a network running both IPv4 and IPv6 to deploy QoS Which consideration is correct about the QoS for IPv4 and IPv6?

A. IPv4 and IPv6 traffic types can use use queuing mechanisms such as LLQ, PQ and CQ.
B. IPv6 packet classification is only available with process switching, whereas IPv4 packet classification is available with both process switching and CEF.
C. IPv6 and IB/4 traffic types can use a single QoS policy to match both protocols
D. Different congestion management mechanisms need to be used for IPv4 and IPv6 traffic types

Answer: C

Question No : 2

Refer to the exhibit.
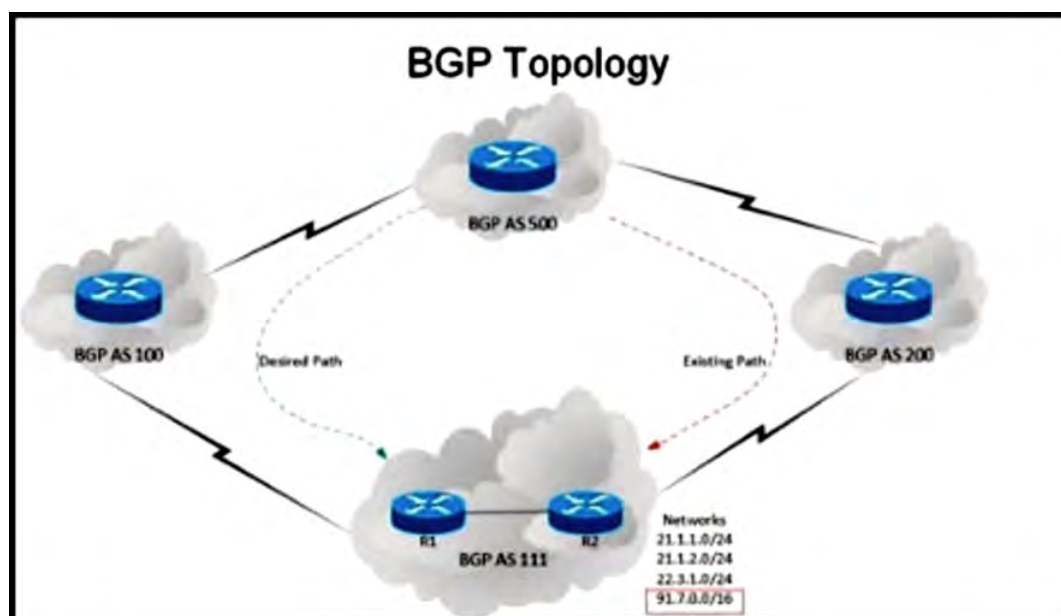
An engineer has been asked to redesign the traffic flow toward AS 111 coming from AS 500.Traffic destined to AS 111 network 91 7 0.0/16 should come in via AS 100. while traffic destined to all other networks in AS 111 should continue to use the existing path Which BGP attributes are best suited to control this inbound traffic coming from BGP AS 500 Into

the 91.7.0.0/16 network?

A. Prepend AS path for the 91.7.0.0/16 network and set it for neighbor in AS 200.
B. Use extended community for the 91.7.0.0/16 network, not advertising it to the bi-lateral peer.
C. Use local preference on R1 for the networks that AS 500 advertises to AS 111.
D. Set higher MED for neighbor in AS 100 to influence incoming traffic for the 91. 7.0.0/16 network.

Answer: A

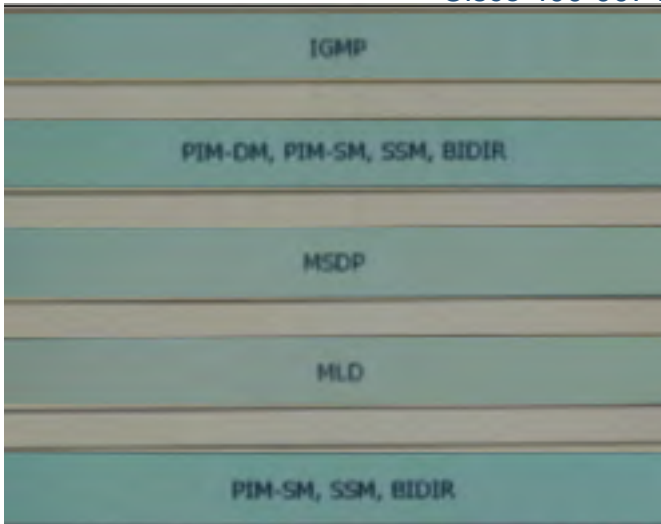## Question No : 3 DRAG DROP

Drag and drop the multicast protocols from the left onto the current design situation on the right.
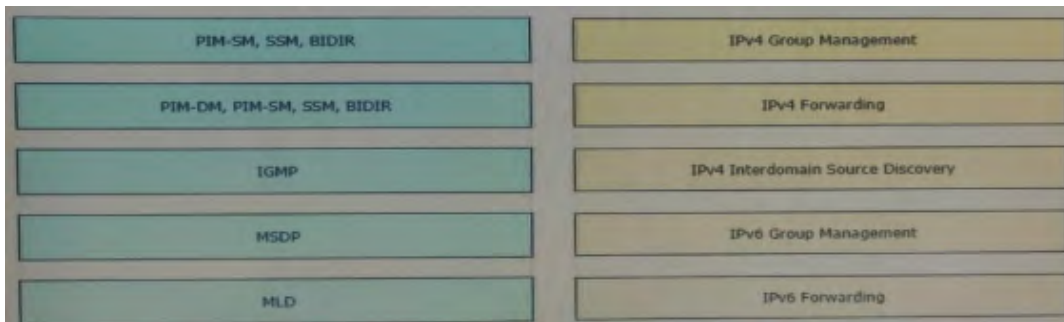
Answer:

Explanation:

A picture containing table

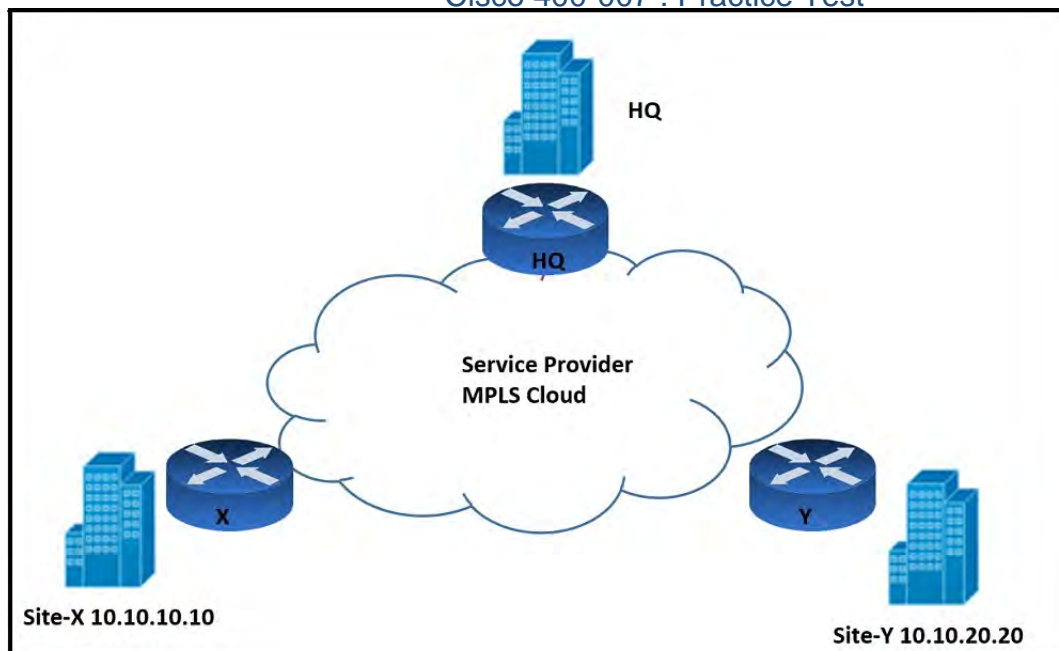Description automatically generated

Question No : 4

Which three components are part of the foundational information security principles of the CIA triad? (Choose three.)

A. cryptography
B. confidentiality
C. C. authorization
D. identification
E. integrity
F. availability

Answer: B,E,F

Question No : 5

Refer to the exhibit. An architect must design an enterprise WAN that connects the headquarters with 22 branch offices. The number of remote sites is expected to triple in the next three years. The final solution must comply with these requirements:

- Only the loopback address of each of the enterprise CE X and Y routers must be advertised to the interconnecting service provider cloud network.
- The transport layer must carry the VPNv4 label and VPN payload over the MP-BGP control plane.
- The transport layer must not be under service provider control.

Which enterprise WAN transport virtualization technique meets the requirements?

A. EIGRP Over the Top
B. MPLS over BGP over multipoint GRE
C. DMVPN per VRF
D. point-to-point GRE per VRF

Answer: B

Question No : 6

Which two conditions must be met for EIGRP to maintain an alternate loop-free path to a remote network? (Choose two.)

A. The Reported Distance from a successor is lower than the local Feasible Distance.

B. The Reported Distance from a successor is higher than the local Feasible Distance.

C. The feasibility condition does not need to be met.

D. The Feasible Distance from a successor is lower than the local Reported Distance.

E. A feasible successor must be present.

Answer: A,E

Question No : 7

A customer asks you to perform a high level review of their upcoming WAN refresh for remote sites The review is specially focused on their retail store operations consisting of 500+ locations connected via mutlipoint IPsec VPN solution. Which routing protocol would be valid but would also be the most restrictive for the expansion of this deployment model?

A. EIGRP

B. IS-IS

C. OSPF

D. BGP

Answer: B

Question No : 8

What is an architectural framework created by ETSI that defines standards to decouple network functions from proprietary hardware-based appliances and have them run in software on standard x86 servers?

A. NFVIS

B. NFV

C. VNF

Answer: C

Question No : 9

What best describes the difference between Automation and Orchestration?

A. Automation refers to an automatic process for completing a single task and Orchestration refers to assembling and coordinating a set of tasks and conditions.

B. Automation describes a hands-off configuration process while Orchestration refers to sets of automation tasks that require the network administrator to coordinate
C. Automation refers to an automatic process for completing multiple tasks with conditions and Orchestration refers to executing tasks in parallel.
D. Automation refers to scripting languages (Python. Ansible etc.) and Orchestration refers to commercial products that control configuration deployment

Answer: A

Question No : 10

A BGP route reflector in the network is taking longer than expected to coverage during large network changes. Troubleshooting shows that the router cannot handle all the TCP acknowledgements during route updates. Which action can be performed to tune the device performance?

A. Increase the size of the hold queue.
B. Increase the size of the large buffers.
C. Decrease the size of the small buffers.
D. Increase the keepalive timers for each BGP neighbor.

Answer: A

Question No : 11

In search of a system capable of hosting, monitoring compiling. and testing code in an automated way, what can be recommended to the organization?

A. Jenkins
B. Ansible
C. Perl
D. Chef

Answer: A

Question No : 12

A financial company requires that a custom TCP-based stock-trading application be

prioritized over all other traffic for the business due to the associated revenue. The company also requires that VoIP be prioritized for manual trades. Which directive should be followed when a QoS strategy is developed for the business?

A. Allow VoIP and the custom application to share the same priority queue,
B. The custom application and VoIP must be assigned their own separate priority queue.
C. Interleave the custom application with other TCP applications in the same CBWR
D. Avoid placing the custom application in a CBWFQ queue that contains other

Answer: C

Question No : 13

Which two benefits can software defined networks provide to businesses? (Choose two.)

A. provides additional redundancy
B. decentralized management
C. reduced latency
D. enables innovation
E. reduction of OpEx/CapEx
F. meets high traffic demands

Answer: D,E

Question No : 14

An international media provider is an early adopter of Docker and micro services and is using an open-source homegrown container orchestration system. A few years ago, they migrated from on-premises data centers to the cloud Now they are faced with challenges related to management of the deployed services with their current homegrown orchestration system.

Which platform is well-suited as a state-aware orchestration system?

A. Puppet
B. Kubemetes
C. Ansible
D. Terraform

Answer: B

Question No : 15

Hybrid cloud computing allows organizations to like advantage of public and private cloud models Which best practice should organizations follow to ensure data security in the private cloud?

A. Use standard protocols for data transmission over the network.
B. Encrypt data when it is at rest and in motion
C. Communicate all data security risks to customers and end users.
D. Use standard network protocols for data communication between unsecured network connections.

Answer: B

Question No : 16

The Layer 3 control plane is the intelligence over the network that steers traffic toward its intended destination. Which two techniques can be used in service provider-style networks to offer a more dynamic, flexible, controlled, and secure control plane design? (Choose two.)

A. access control lists
B. firewalls
C. QoS policy propagation with BGP
D. remote black-holing trigger
E. prefix lists

Answer: D,E

Question No : 17

Company XYZ has designed their network to run GRE over IPsec on their Internet-based VPN to connect two sites. Which IPsec tunneling feature can they enable to optimize the data flow while ensuring that the headers contain no duplicate IP addresses?

A. Transport Mode in IPsec Phase I
B. Transport Mode in IPsec Phase II
C. Tunnel Mode in IPsec Phase II

D. Tunnel Mode in IPsec Phase I

Answer: B

Question No : 18

What advantage of placing the IS-IS layer 2 flooding domain boundary at the core Layer in a three-layer hierarchical network is true?

A. The Layer 1 and Layer 2 domains can easily overlap
B. It reduces the complexity of the Layer 1 domains
C. It can be applied to any kind of topology
D. The Layer 2 domain is contained and more stable

Answer: D

Question No : 19

You have been tasked with designing a data center interconnect to provide business continuity You want to encrypt the traffic over the DCI using IEEE 802 1AE MACsec to prevent the deployment of any firewall or IPS. Which two interconnect technologies support MACsec? (Choose two.)

A. EoMPLS
B. MPLS Layer 3 VPN
C. DMVPN
D. GET VPN
E. KVPLS

Answer: A,E

Question No : 20

Which two foundational aspects of IoT are still evolving and being worked on by the industry at large? (Choose two)

A. WiFi protocols
B. Regulatory domains
C. Low energy Bluetooth sensors

D. IoT consortia

E. Standards

Answer: A,C

Question No : 21

Which three Cisco products are used in conjunction with Red Hat to provide an NFVi solution? (Choose three.)

A. Cisco Prime Service Catalog

B. Cisco Open Virtual Switch

C. Cisco Nexus switches

D. Cisco UCS

E. Cisco Open Container Platform

F. Cisco Virtual Network Function

Answer: C,D,F

Question No : 22

Which three elements help network designers to construct secure systems that protect information and resources (such as devices, communication, and data) from unauthorized access, modification, inspection, or destruction? (Choose three.)

A. confidential

B. serviceability

C. reliability

D. availability

E. integrity

F. scalability

Answer: A,D,E

Question No : 23

An architect receives a business requirement from a CTO that states the RTO and RPO for a new system should be as close as possible to zero. Which replication method and data

center technology should be used?

A. asynchronous replication over dual data centers via DWDM
B. synchronous replication over geographically dispersed dual data centers via MPLS
C. synchronous replication over dual data centers via Metro Ethernet
D. asynchronous replication over geographically dispersed dual data centers via CWDM

Answer: B

Explanation: RTO and RPO are measures of how quickly and accurately a system can be recovered after a disaster or failure. RTO refers to the amount of time it takes to restore a system to its normal operation after a failure, while RPO refers to the amount of data that can be lost as a result of a failure. In synchronous replication, data is written to both the primary and secondary systems at the same time. This ensures that the data on the secondary system is always up-to-date and ready for use in the event of a disaster or failure. Geographically dispersed dual data centers refer to two data centers that are located in different geographical locations, which can help to reduce the risk of a disaster or failure impacting both data centers at the same time.

Question No : 24

Which DCI technology utilizes a "flood and learn" technique to populate the Layer2 forwarding table?

A. LISP
B. OTV
C. VPLS
D. EVPN

Answer: C

Question No : 25

While reviewing an existing network design, you are discussing the characteristics of different STP versions. Which protocol minimizes unicast flooding during a Topology Change Notification in a Layer 2 switched network with many VLANs?

A. PVRSTP
B. MST
C. STP

D. PVSTP+

Answer: A

Question No : 26

Company ABC wants to minimize the risk of users plugging unauthorized switches and hubs into the network Which two features can be used on the LAN access ports to support this design requirement? (Choose two.)

A. Loop Guard
B. PortFast
C. DTF
D. Root Guard
E. BPDU Guard

Answer: B,E

Question No : 27

Which best practice ensures data security in the private cloud?

A. Use IPsec for communication between unsecured network connection
B. Encrypt data at rest and in transition.
C. Use the same vendor for consistent encryption.
D. Anonymize data ownership to comply with privacy rules.

Answer: B

Question No : 28

A multicast network is sing Bidirectional PIM. Which two combined actions achieve high availability so that two RPs within the same network can act in a redundant manner? (Choose two)

A. Use two phantom RP addresses
B. Manipulate the administration distance of the unicast routes to the two RPs

C. Manipulate the multicast routing table by creating static mroutes to the two RPs

D. Advertise the two RP addresses in the routing protocol

E. Use anycast RP based on MSDP peering between the two RPs

F. Control routing to the two RPs through a longest match prefix

Answer: A,F

Explanation: https://community.cisco.com/t5/networking-knowledge-base/rp-redundancy-with-pim-bidir-phantom-rp/ta-p/3117191

Question No : 29

You have been asked to design a remote access VPN solution to support up to 2000 devices. You must ensure that only corporate assets are allowed to connect to the VPN, and users must authenticate to gain access of their based on their user role. Users must use a password that they are already using to access existing applications . A user may not always use the same device to access the VPN. Which two options combined meet the requirements? (Choose two)

A. Use local usernames and passwords on the VPN device

B. Deploy a central authentication directory that users can be authenticated and authorized against

C. Deploy certificates that are unique to each user

D. Deploy an IPsec VPN solution

E. Deploy certificates that are unique to each device

F. Deploy a SSL VPN solution

Answer: B,F

Question No : 30 DRAG DROP

The network team in XYZ Corp wants to modernize their infrastructure and is evaluating an implementation and migration plan to allow integration MPLS-based, Layer 2 Ethernet services managed by a service provider to connect branches and remote offices. To decrease OpEx and improve

response times when network components fail, XYZ Corp decided to acquire and deploy new routers. The network currently is operated over E1 leased lines (2 Mbps) with a managed CE service provided by the telco.

Drag and drop the implementation steps from the left onto the corresponding targets on the right in the correct order.

Activation of the MPLS-based L2VPN service.	Step 1	15
Monitor performance of the Ethernet service for a predefined period of time.	Step 2	
Decomission E1 leased line.	Step 3	
Deployment of new branch routers.	Step 4	
Test and validation of SLA parameters in the L2VPN.	Step 5	
Migrate E1 to the new Ethernet service.	Step 6	

Answer:

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Activation of the MPLS-based L2VPN service.	Deployment of new branch routers.
Monitor performance of the Ethernet service for a predefined period of time.	Activation of the MPLS-based L2VPN service.
Decomission E1 leased line.	Test and validation of SLA parameters in the L2VPN.
Deployment of new branch routers.	Migrate E1 to the new Ethernet service.
Test and validation of SLA parameters in the L2VPN.	Monitor performance of the Ethernet service for a predefined period of time.
Migrate E1 to the new Ethernet service.	Decomission E1 leased line.

Explanation:

Deployment of new branch routers.

Activation of the MPLS-based L2VPN service.

Test and validation of SLA parameters in the L2VPN.

Migrate E1 to the new Ethernet service.

Monitor performance of the Ethernet service for a predefined period of time.

Decomission E1 leased line.

Table

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Question No : 31

Retef to the exhibit.
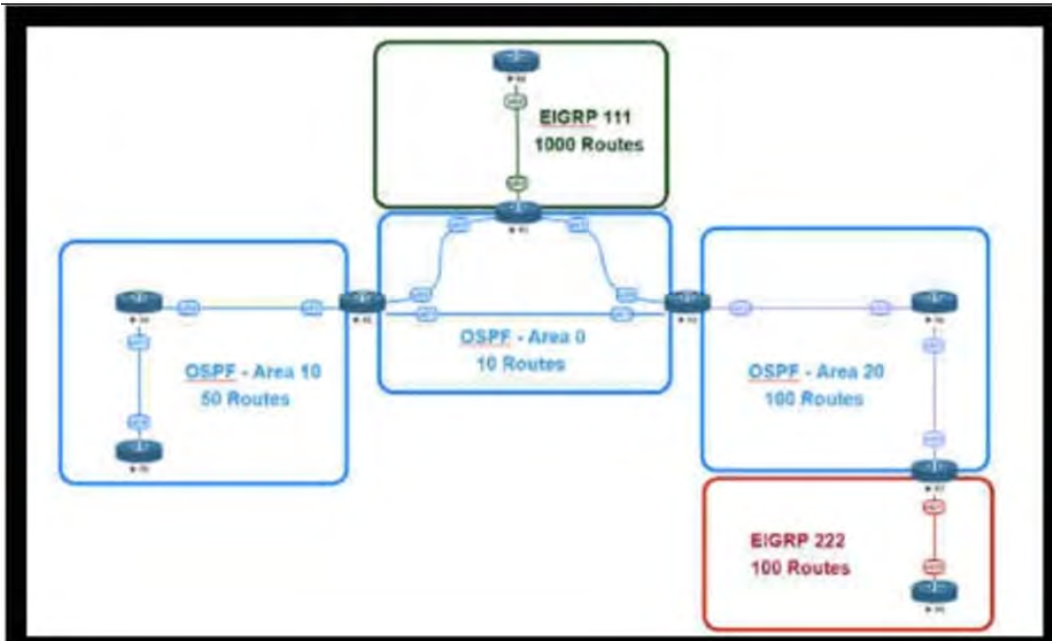
This network is running OSPF and EIGRP as the routing protocols Mutual redistribution of the routing protocols has been contoured on the appropriate ASBRs The OSPF network must be designed so that flapping routes m EIGRP domains do not affect the SPF runs within OSPF The design solution must not affect the way EIGRP routes are propagated into the EIGRP domains Which technique accomplishes the requirement?

A. route summarization the ASBR interfaces facing the OSPF domain
B. route summarization on the appropriate ASBRS.
C. route summarization on the appropriate ABRS.
D. route summarization on EIDRP routers connecting toward the ASBR

Answer: B

Question No : 32

What are two top cloud-native security challenges faced by today's cloud-oriented organizations? (Choose two)

A. establishing user roles
B. polymorphism
C. lack of visibility and tracking
D. increased attack surface
E. user credential validation

Answer: C,D

Question No : 33

Company XYZ is redesigning their QoS policy. Some of the applications used by the company are real-time applications. The QoS design must give these applications preference in terms of transmission. Which QoS strategy can be used to fulfill the requirement?

A. weighted fair queuing
B. weighted random early detection
C. low-latency queuing
D. first-in first-out

Answer: C

Question No : 34

Company XYZ wants to use the FCAPS ISO standard for network management design. The focus of the design should be to monitor and keep track of any performance issues by continuously collecting and analyzing statistical information to monitor, correct, and optimize any reduced responsiveness across the network. Which layer accomplishes this design requirement?

A. fault management
B. accounting management
C. performance management
D. security management

Answer: C

Question No : 35

What are two examples of business goals to be considered when a network design is built? (Choose two.)

A. standardize resiliency
B. minimize operational costs
C. integrate endpoint posture
D. ensure faster obsolescence

E. reduce complexity

Answer: B,E

Question No : 36

Which tool automates network implementation activities and shortens the implementation lifecycle?

A. LISP
B. Java
C. Conclusion
D. Python

Answer: D

Question No : 37

Company XYZ Is running a redundant private WAN network using OSPF as the underlay protocol The current design accommodates for redundancy In the network, but it Is taking over 30 seconds for the network to reconverge upon failure Which technique can be Implemented In the design to detect such a failure in a subsecond?

A. STP
B. fate sharing
C. OSPF LFA
D. BFD
E. flex links

Answer: D

Question No : 38

You have been asked to design a high-density wireless network for a university campus. Which two principles would you apply in order to maximize the wireless network capacity? (Choose two.)

A. Implement a four-channel design on 2.4 GHz to increase the number of available

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