Exam Questions ANS-C01

AWS Certified Advanced Networking Specialty Exam

https://www.2passeasy.com/dumps/ANS-C01/

NEW QUESTION 1
An IoT company sells hardware sensor modules that periodically send out temperature, humidity, pressure, and location data through the MQTT messaging protocol. The hardware sensor modules send this data to the company's on-premises MQTT brokers that run on Linux servers behind a load balancer. The hardware sensor modules have been hardcoded with public IP addresses to reach the brokers.
The company is growing and is acquiring customers across the world. The existing solution can no longer scale and is introducing additional latency because of the company's global presence. As a result, the company decides to migrate its entire infrastructure from on premises to the AWS Cloud. The company needs to migrate without reconfiguring the hardware sensor modules that are already deployed across the world. The solution also must minimize latency.
The company migrates the MQTT brokers to run on Amazon EC2 instances. What should the company do next to meet these requirements?

A. Place the EC2 instances behind a Network Load Balancer (NLB). Configure TCP listener
B. Use Bring Your Own IP (BYOIP) from the on-premises network with the NLB.
C. Place the EC2 instances behind a Network Load Balancer (NLB). Configure TCP listener
D. Create an AWS Global Accelerator accelerator in front of the NLUse Bring Your Own IP (BYOIP) from the on-premises network with Global Accelerator.
E. Place the EC2 instances behind an Application Load Balancer (ALB). Configure TCP listener
F. Create an AWS Global Accelerator accelerator in front of the AL
G. Use Bring Your Own IP (BYOIP) from the on-premises network with Global Accelerator
H. Place the EC2 instances behind an Amazon CloudFront distributio
I. Use Bring Your Own IP (BYOIP) from the on-premises network with CloudFront.

Answer: B

NEW QUESTION 2
A company has deployed Amazon EC2 instances in private subnets in a VPC. The EC2 instances must initiate any requests that leave the VPC, including requests to the company's on-premises data center over an AWS Direct Connect connection. No resources outside the VPC can be allowed to open communications directly to the EC2 instances.
The on-premises data center's customer gateway is configured with a stateful firewall device thatfilters for incoming and outgoing requests to and from multiple VPCs. In addition, the company wants to use a single IP match rule to allow all the communications from the EC2 instances to its data center from a single IP address.
Which solution will meet these requirements with the LEAST amount of operational overhead?

A. Create a VPN connection over the Direct Connect connection by using the on-premises firewal
B. Use the firewall to block all traffic from on premises to AW
C. Allow a stateful connection from the EC2 instances to initiate the requests.
D. Configure the on-premises firewall to filter all requests from the on-premises network to the EC2 instance
E. Allow a stateful connection if the EC2 instances in the VPC initiate the traffic.
F. Deploy a NAT gateway into a private subnet in the VPC where the EC2 instances are deploye
G. Specify the NAT gateway type as privat
H. Configure the on-premises firewall to allow connections from the IP address that is assigned to the NAT gateway.
I. Deploy a NAT instance into a private subnet in the VPC where the EC2 instances are deployed.Configure the on-premises firewall to allow connections from the IP address that is assigned to the NAT instance.

Answer: C

NEW QUESTION 3
A company has developed an application on AWS that will track inventory levels of vending machines and initiate the restocking process automatically. The company plans to integrate this application with vending machines and deploy the vending machines in several markets around the world. The application resides in a VPC in the us-east-1 Region. The application consists of an Amazon Elastic Container Service (Amazon ECS) cluster behind an Application Load Balancer (ALB). The communication from the vending machines to the application happens over HTTPS.
The company is planning to use an AWS Global Accelerator accelerator and configure static IP addresses of the accelerator in the vending machines for application endpoint access. The application must be accessible only through the accelerator and not through a direct connection over the internet to the ALB endpoint.
Which solution will meet these requirements?

A. Configure the ALB in a private subnet of the VP
B. Attach an internet gateway without adding routes in the subnet route tables to point to the internet gatewa
C. Configure the accelerator with endpoint groups that include the ALB endpoin
D. Configure the ALB’s security group to only allow inbound traffic from the internet on the ALB listener port.
E. Configure the ALB in a private subnet of the VP
F. Configure the accelerator with endpoint groups that include the ALB endpoin
G. Configure the ALB's security group to only allow inbound traffic from the internet on the ALB listener port.
H. Configure the ALB in a public subnet of the VPAttach an internet gatewa
I. Add routes in the subnet route tables to point to the internet gatewa
J. Configure the accelerator with endpoint groups that include the ALB endpoin
K. Configure the ALB's security group to only allow inbound traffic from the accelerator's IP addresses on the ALB listener port.
L. Configure the ALB in a private subnet of the VP
M. Attach an internet gatewa
N. Add routes in the subnet route tables to point to the internet gatewa
O. Configure the accelerator with endpoint groups that include the ALB endpoin
P. Configure the ALB's security group to only allow inbound trafficfrom the accelerator's IP addresses on the ALB listener port.

Answer: A

Explanation:
Please read the below link typically describing ELB integration with AWS Global accelator (and the last line of the extract) - https://docs.aws.amazon.com/global-accelerator/latest/dg/secure-vpc-connections.html "When you add an internal Application Load Balancer or an Amazon EC2 instance endpoint in AWS Global Accelerator, you enable internet traffic to flow directly to and from the endpoint in Virtual Private Clouds (VPCs) by targeting it in a private subnet. The VPC that contains the load balancer or EC2 instance must have an internet gateway attached to it, to indicate that the VPC accepts internet traffic. However, you don't need public IP addresses on the load balancer or EC2 instance. You also don't need an associated internet gateway route for the subnet."

NEW QUESTION 4
A network engineer needs to standardize a company's approach to centralizing and managing interface VPC endpoints for private communication with AWS services. The company uses AWS Transit Gateway for inter-VPC connectivity between AWS accounts through a hub-and-spoke model. The company's network services team must manage all Amazon Route 53 zones and interface endpoints within a shared services AWS account. The company wants to use thiscentralized model to provide AWS resources with access to AWS Key Management Service (AWS KMS) without sending traffic over the public internet.
What should the network engineer do to meet these requirements?

A. In the shared services account, create an interface endpoint for AWS KM
B. Modify the interface endpoint by disabling the private DNS nam
C. Create a private hosted zone in the shared services account with an alias record that points to the interface endpoin
D. Associate the private hosted zone with the spoke VPCs in each AWS account.
E. In the shared services account, create an interface endpoint for AWS KM
F. Modify the interface endpoint by disabling the private DNS nam
G. Create a private hosted zone in each spoke AWS account with an alias record that points to the interface endpoin
H. Associate each private hosted zone with the shared services AWS account.
I. In each spoke AWS account, create an interface endpoint for AWS KM
J. Modify each interface endpoint by disabling the private DNS nam
K. Create a private hosted zone in each spoke AWS account with an alias record that points to each interface endpoin
L. Associate each private hosted zone with the shared services AWS account.
M. In each spoke AWS account, create an interface endpoint for AWS KM
N. Modify each interface endpoint by disabling the private DNS nam
O. Create a private hosted zone in the shared services account with an alias record that points to each interface endpoin
P. Associate the private hosted zone with the spoke VPCs in each AWS account.

Answer: A

NEW QUESTION 5
A company is planning to use Amazon S3 to archive financial data. The data is currently stored in an
on-premises data center. The company uses AWS Direct Connect with a Direct Connect gateway and a transit gateway to connect to the on-premises data center. The data cannot be transported over the public internet and must be encrypted in transit.
Which solution will meet these requirements?

A. Create a Direct Connect public VI
B. Set up an IPsec VPN connection over the public VIF to access Amazon S3. Use HTTPS for communication.
C. Create an IPsec VPN connection over the transit VI
D. Create a VPC and attach the VPC to the transit gatewa
E. In the VPC, provision an interface VPC endpoint for Amazon S3. Use HTTPS for communication.
F. Create a VPC and attach the VPC to the transit gatewa
G. In the VPC, provision an interface VPC endpoint for Amazon S3. Use HTTPS for communication.
H. Create a Direct Connect public VI
I. Set up an IPsec VPN connection over the public VIF to the transit gatewa
J. Create an attachment for Amazon S3. Use HTTPS for communication.

Answer: B

Explanation:
https://docs.aws.amazon.com/vpn/latest/s2svpn/private-ip-dx.html
An IPsec VPN connection over the transit VIF can encrypt traffic between the on-premises network and AWS without using public IP addresses or the internet2. A VPC endpoint for Amazon S3 can enable private access to S3 buckets within the same region.HTTPS can provide additional encryption for communication.

NEW QUESTION 6
A company has its production VPC (VPC-A) in the eu-west-1 Region in Account 1. VPC-A is attached to a transit gateway (TGW-A) that is connected to an on-premises data center in Dublin, Ireland, by an AWS
Direct Connect transit VIF that is configured for an AWS Direct Connect gateway. The company also has a staging VPC (VPC-B) that is attached to another transit gateway (TGW-B) in the eu-west-2 Region in Account 2.
A network engineer must implement connectivity between VPC-B and the on-premises data center in Dublin. Which solutions will meet these requirements? (Choose two.)

A. Configure inter-Region VPC peering between VPC-A and VPC-
B. Add the required VPC peering route
C. Add the VPC-B CIDR block in the allowed prefixes on the Direct Connect gateway association.
D. Associate TGW-B with the Direct Connect gatewa
E. Advertise the VPC-B CIDR block under the allowed prefixes.
F. Configure another transit VIF on the Direct Connect connection and associate TGW-
G. Advertise the VPC-B CIDR block under the allowed prefixes.
H. Configure inter-Region transit gateway peering between TGW-A and TGW-
I. Add the peering routes in the transit gateway route table
J. Add both the VPC-A and the VPC-B CIDR block under the allowed prefix list in the Direct Connect gateway association.
K. Configure an AWS Site-to-Site VPN connection over the transit VIF to TGW-B as a VPN attachment.

Answer: BC

Explanation:
* B. Associate TGW-B with the Direct Connect gateway. Advertise the VPC-B CIDR block under the allowed prefixes. This will allow traffic from VPC-B to be sent over the Direct Connect connection to the on-premises data center via TGW-B. C. Configure another transit VIF on the Direct Connect connection and associate TGW-B. Advertise the VPC-B CIDR block under the allowed prefixes. This will enable the use of the Direct Connect connection for VPC-B's traffic by connecting TGW-B to the Direct Connect gateway.

NEW QUESTION 7
A company has hundreds of VPCs on AWS. All the VPCs access the public endpoints of Amazon S3 and AWS Systems Manager through NAT gateways. All the

traffic from the VPCs to Amazon S3 and Systems Manager travels through the NAT gateways. The company's network engineer must centralize access to these services and must eliminate the need to use public endpoints.
Which solution will meet these requirements with the LEAST operational overhead?

A. Create a central egress VPC that has private NAT gateway
B. Connect all the VPCs to the central egress VPC by using AWS Transit Gatewa
C. Use the private NAT gateways to connect to Amazon S3 and Systems Manager by using private IP addresses.
D. Create a central shared services VP
E. In the central shared services VPC, create interface VPC endpoints for Amazon S3 and Systems Manager to acces
F. Ensure that private DNS is turned of
G. Connect all the VPCs to the central shared services VPC by using AWS Transit Gatewa
H. Create an Amazon Route 53 forwarding rule for each interface VPC endpoin
I. Associate the forwarding rules with all the VPC
J. Forward DNS queries to the interface VPC endpoints in the shared services VPC.
K. Create a central shared services VPIn the central shared services VPC, create interface VPC endpoints for Amazon S3 and Systems Manager to acces
L. Ensure that private DNS is turned of
M. Connect all the VPCs to the central shared services VPC by using AWS Transit Gatewa
N. Create an Amazon Route 53 private hosted zone with a full service endpoint name for Amazon S3 and Systems Manage
O. Associate the private hosted zones with all the VPC
P. Create an alias record in each private hosted zone with the full AWS service endpoint pointing to the interface VPC endpoint in the shared services VPC.
Q. Create a central shared services VP
R. In the central shared services VPC, create interface VPC endpoints for Amazon S3 and Systems Manager to acces
S. Connect all the VPCs to the central shared services VPC by using AWS Transit Gatewa
T. Ensure that private DNS is turned on for the interface VPC endpoints and that the transit gateway is created with DNS support turned on.

Answer: B

Explanation:
Interface VPC endpoints enable private connectivity between VPCs and supported AWS serviceswithout requiring an internet gateway, NAT device, VPN connection, or AWS Direct Connect connection2. Interface VPC endpoints are powered by AWS PrivateLink, a technology that enables private access to AWS services2. Amazon S3 and AWS Systems Manager support interface VPC endpoin2ts. By turning off private DNS, the interface VPC endpoints can be accessed by using their private IP addresses2. By using Amazon Route 53 forwarding rules, DNS queries can be resolved to the interface VPC endpoints in the shared services VPC3.

NEW QUESTION 8
A real estate company is building an internal application so that real estate agents can upload photos and videos of various properties. The application will store these photos and videos in an Amazon S3 bucket as objects and will use Amazon DynamoDB to store corresponding metadata. The S3 bucket will be configured to publish all PUT events for new object uploads to an Amazon Simple Queue Service (Amazon SQS) queue.
A compute cluster of Amazon EC2 instances will poll the SQS queue to find out about newly uploaded objects. The cluster will retrieve new objects, perform proprietary image and video recognition and classification update metadata in DynamoDB and replace the objects with new watermarked objects. The company does not want public IP addresses on the EC2 instances.
Which networking design solution will meet these requirements MOST cost-effectively as application usage increases?

A. Place the EC2 instances in a public subne
B. Disable the Auto-assign Public IP option while launching the EC2 instance
C. Create an internet gatewa
D. Attach the internet gateway to the VP
E. In the public subnet's route table, add a default route that points to the internet gateway.
F. Place the EC2 instances in a private subne
G. Create a NAT gateway in a public subnet in the same Availability Zon
H. Create an internet gatewa
I. Attach the internet gateway to the VP
J. In the public subnet's route table, add a default route that points to the internet gateway
K. Place the EC2 instances in a private subne
L. Create an interface VPC endpoint for Amazon SQ
M. Create gateway VPC endpoints for Amazon S3 and DynamoDB.
N. Place the EC2 instances in a private subne
O. Create a gateway VPC endpoint for Amazon SQS.Create interface VPC endpoints for Amazon S3 and DynamoDB.

Answer: C

NEW QUESTION 9
All IP addresses within a 10.0.0.0/16 VPC are fully utilized with application servers across two Availability Zones. The application servers need to send frequent UDP probes to a single central authentication server on the Internet to confirm that is running up-to-date packages. The network is designed for application servers to use a single NAT gateway for internal access. Testing reveals that a few of the servers are unable to communicate with the authentication server.

A. The NAT gateway does not support UDP traffic.
B. The authentication server is not accepting traffic.
C. The NAT gateway cannot allocate more ports.
D. The NAT gateway is launched in a private subnet.

Answer: C

Explanation:
Ref:https://docs.aws.amazon.com/vpc/latest/userguide/vpc-nat-gateway.html
"A NAT gateway can support up to 55,000 simultaneous connections to each unique destination. This limit also applies if you create approximately 900 connections per second to a single destination (about 55,000 connections per minute). If the destination IP address, the destination port, or the protocol (TCP/UDP/ICMP) changes, you can create an additional 55,000 connections. For more than 55,000 connections, there is an increased chance of connection errors due to port allocation errors. These errors can be monitored by viewing the ErrorPortAllocation CloudWatch metric for your NAT gateway. For more information, see Monitoring NAT Gateways Using Amazon CloudWatch."

NEW QUESTION 10
Your organization has a newly installed 1-Gbps AWS Direct Connect connection. You order the cross-connect from the Direct Connect location provider to the port on your router in the same facility. To enable the use of your first virtual interface, your router must be configured appropriately.
What are the minimum requirements for your router?

A. 1-Gbps Multi Mode Fiber Interface, 802.1Q VLAN, Peer IP Address, BGP Session with MD5.
B. 1-Gbps Single Mode Fiber Interface, 802.1Q VLAN, Peer IP Address, BGP Session with MD5.
C. IPsec Parameters, Pre-Shared key, Peer IP Address, BGP Session with MD5
D. BGP Session with MD5, 802.1Q VLAN, Route-Map, Prefix List, IPsec encrypted GRE Tunnel

Answer: B

NEW QUESTION 10
A customer has set up multiple VPCs for Dev, Test, Prod, and Management. You need to set up AWS Direct Connect to enable data flow from on-premises to each VPC. The customer hasmonitoring software running in the Management VPC that collects metrics from the instances in all the other VPCs. Due to budget requirements, data transfer charges should be kept at minimum.
Which design should be recommended?

A. Create a total of four private VIFs, one for each VPC owned by the customer, and route traffic between VPCs using the Direct Connect link.
B. Create a private VIF to the Management VPC, and peer this VPC to all other VPCs.
C. Create a private VIF to the Management VPC, and peer this VPC to all other VPCs, enable source/destination NAT in the Management VPC.
D. Create a total of four private VIFs, and enable VPC peering between all VPCs.

Answer: D

Explanation:
- creating VPC peering is free of charge - traffic costs ~0.01€/GB for VPC peering (IN + OUT) and
~0.02€/GB for direct connect (OUT only). As the communication involved in monitoring will never have IN
== OUT, then 0.01 * (IN + OUT) will always be lower the 0.02 * OUT, ergo VPC peering will be cheaper

NEW QUESTION 15
A network engineer needs to update a company's hybrid network to support IPv6 for the upcoming release of a new application. The application is hosted in a VPC in the AWS Cloud. The company's current AWS infrastructure includes VPCs that are connected by a transit gateway. The transit gateway is connected to the on-premises network by AWS Direct Connect and AWS Site-to-Site VPN. The company's on-premises devices have been updated to support the new IPv6 requirements.
The company has enabled IPv6 for the existing VPC by assigning a new IPv6 CIDR block to the VPC and by assigning IPv6 to the subnets for dual-stack support. The company has launched new Amazon EC2 instances for the new application in the updated subnets.
When updating the hybrid network to support IPv6 the network engineer must avoid making any changes to the current infrastructure. The network engineer also must block direct access to the instances' new IPv6 addresses from the internet. However, the network engineer must allow outbound internet access from the instances.
What is the MOST operationally efficient solution that meets these requirements?

A. Update the Direct Connect transit VIF and configure BGP peering with the AWS assigned IPv6 peering addres
B. Create a new VPN connection that supports IPv6 connectivit
C. Add an egress-only internet gatewa
D. Update any affected VPC security groups and route tables to provide connectivity within the VPC and between the VPC and the on-premises devices
E. Update the Direct Connect transit VIF and configure BGP peering with the AWS assigned IPv6 peering addres
F. Update the existing VPN connection to support IPv6 connectivit
G. Add an egress-only internet gatewa
H. Update any affected VPC security groups and route tables to provide connectivity within the VPC and between the VPC and the on-premises devices.
I. Create a Direct Connect transit VIF and configure BGP peering with the AWS assigned IPv6 peering addres
J. Create a new VPN connection that supports IPv6 connectivit
K. Add an egress-only internet gatewa
L. Update any affected VPC security groups and route tables to provide connectivity within the VPC and between the VPC and the on-premises devices.
M. Create a Direct Connect transit VIF and configure BGP peering with the AWS assigned IPv6 peering addres
N. Create a new VPN connection that supports IPv6 connectivit
O. Add a NAT gatewa
P. Update any affected VPC security groups and route tables to provide connectivity within the VPC and between the VPC and the on-premises devices.

Answer: B

NEW QUESTION 20
A company uses a 1 Gbps AWS Direct Connect connection to connect its AWS environment to its
on-premises data center. The connection provides employees with access to an application VPC that is hosted on AWS. Many remote employees use a company-provided VPN to connect to the data center. These employees are reporting slowness when they access the application during business hours. On-premises users have started to report similar slowness while they are in the office.
The company plans to build an additional application on AWS. On-site and remote employees will use the additional application. After the deployment of this additional application, the company will need 20% more bandwidth than the company currently uses. With the increased usage, the company wants to add resiliency to the AWS connectivity. A network engineer must review the current implementation and must make improvements within a limited budget.
What should the network engineer do to meet these requirements MOST cost-effectively?

A. Set up a new 1 Gbps Direct Connect dedicated connection to accommodate the additional traffic load from remote employees and the additional applicatio
B. Create a link aggregation group (LAG).
C. Deploy an AWS Site-to-Site VPN connection to the application VP
D. Configure the on-premises routing for the remote employees to connect to the Site-to-Site VPN connection.
E. Deploy Amazon Workspaces into the application VPInstruct the remote employees to connect to Workspaces.
F. Replace the existing 1 Gbps Direct Connect connection with two new 2 Gbps Direct Connect hosted connection
G. Create an AWS Client VPN endpoint in the application VP
H. Instruct the remote employees to connect to the Client VPN endpoint.

Answer: A

Explanation:
Setting up a new 1 Gbps Direct Connect dedicated connection to accommodate the additional trafficload from remote employees and the additional application would provide more bandwidth and lower latency than a VPN connection over the public internet1. Creating a link aggregation group (LAG) with the existing and new Direct Connect connections would provide resiliency and redundancy for the AWS connectivity2.

NEW QUESTION 21
A company is building its website on AWS in a single VPC. The VPC has public subnets and private subnets in two Availability Zones. The website has static content such as images. The company is using Amazon S3 to store the content.
The company has deployed a fleet of Amazon EC2 instances as web servers in a private subnet. The EC2 instances are in an Auto Scaling group behind an Application Load Balancer. The EC2 instances will serve traffic, and they must pull content from an S3 bucket to render the webpages. The company is using AWS Direct Connect with a public VIF for on-premises connectivity to the S3 bucket.
A network engineer notices that traffic between the EC2 instances and Amazon S3 is routing through a NAT gateway. As traffic increases, the company's costs are increasing. The network engineer needs to change the connectivity to reduce the NAT gateway costs that result from the traffic between the EC2 instances and Amazon S3.
Which solution will meet these requirements?

A. Create a Direct Connect private VI
B. Migrate the traffic from the public VIF to the private VIF.
C. Create an AWS Site-to-Site VPN tunnel over the existing public VIF.
D. Implement interface VPC endpoints for Amazon S3. Update the VPC route table.
E. Implement gateway VPC endpoints for Amazon S3. Update the VPC route table.

Answer: D

NEW QUESTION 25
A global company runs business applications in the us-east-1 Region inside a VPC. One of the company's regional offices in London uses a virtual private gateway for an AWS Site-to-Site VPN connection tom the VPC. The company has configured a transit gateway and has set up peering between the VPC and other VPCs that various departments in the company use.
Employees at the London office are experiencing latency issues when they connect to the business applications.
What should a network engineer do to reduce this latency?

A. Create a new Site-to-Site VPN connectio
B. Set the transit gateway as the target gatewa
C. Enable acceleration on the new Site-to-Site VPN connectio
D. Update the VPN device in the London office with the new connection details.
E. Modify the existing Site-to-Site VPN connection by setting the transit gateway as the target gateway.Enable acceleration on the existing Site-to-Site VPN connection.
F. Create a new transit gateway in the eu-west-2 (London) Regio
G. Peer the new transit gateway with the existing transit gatewa
H. Modify the existing Site-to-Site VPN connection by setting the new transit gateway as the target gateway.
I. Create a new AWS Global Accelerator standard accelerator that has an endpoint of the Site-to-Site VPN connectio
J. Update the VPN device in the London office with the new connection details.

Answer: A

Explanation:
Enabling acceleration for a Site-to-Site VPN connection uses AWS Global Accelerator to route traffic from the on-premises network to an AWS edge location that is closest to the customer gateway device1. AWS Global Accelerator optimizes the network path, using the congestion-free AWS global network to route traffic to the endpoint that provides the best application performance2. Setting the transit gateway as the target gateway enables connectivity between the on-premises network and multiple VPCs that are attached to the transit gateway3.

NEW QUESTION 30
A company has expanded its network to the AWS Cloud by using a hybrid architecture with multiple AWS accounts. The company has set up a shared AWS account for the connection to its on-premises data centers and the company offices. The workloads consist of private web-based services for internal use. These services run in different AWS accounts. Office-based employees consume these services by using a DNS name in an on-premises DNS zone that is named example.internal.
The process to register a new service that runs on AWS requires a manual and complicated change request to the internal DNS. The process involves many teams.
The company wants to update the DNS registration process by giving the service creators access that will allow them to register their DNS records. A network engineer must design a solution that will achieve this goal. The solution must maximize cost-effectiveness and must require the least possible number of configuration changes.
Which combination of steps should the network engineer take to meet these requirements? (Choose three.)

A. Create a record for each service in its local private hosted zone (serviceA.account1.aws.example.internal). Provide this DNS record to the employees who need access.
B. Create an Amazon Route 53 Resolver inbound endpoint in the shared account VP
C. Create a conditional forwarder for a domain named aws.example.internal on the on-premises DNS server
D. Set the forwarding IP addresses to the inbound endpoint's IP addresses that were created.
E. Create an Amazon Route 53 Resolver rule to forward any queries made to onprem.example.internal to the on-premises DNS servers.
F. Create an Amazon Route 53 private hosted zone named aws.example.internal in the shared AWSaccount to resolve queries for this domain.
G. Launch two Amazon EC2 instances in the shared AWS accoun
H. Install BIND on each instanc
I. Create a DNS conditional forwarder on each BIND server to forward queries for each subdomain under aws.example.internal to the appropriate private hosted zone in each AWS accoun
J. Create a conditional forwarder for a domain named aws.example.internal on the on-premises DNS server
K. Set the forwarding IP addresses to the IP addresses of the BIND servers.
L. Create a private hosted zone in the shared AWS account for each account that runs the service.Configure the private hosted zone to contain aws.example.internal in the domain (account1.aws.example.internal). Associate the private hosted zone with the VPC that runs the service and the shared account

VPC.

Answer: ABD

Explanation:
To meet the requirements of updating the DNS registration process while maximizing cost-effectiveness and minimizing configuration changes, the network engineer should take the following steps:

- Create an Amazon Route 53 Resolver inbound endpoint in the shared account VPC. Create a conditional forwarder for a domain named aws.example.internal on the on-premises DNS servers. Set the forwarding IP addresses to the inbound endpoint's IP addresses that were created (Option B).
- Create an Amazon Route 53 private hosted zone named aws.example.internal in the shared AWS account to resolve queries for this domain (Option D).
- Create a record for each service in its local private hosted zone (serviceA.account1.aws.example.internal). Provide this DNS record to the employees who need access (Option A).

These steps will allow service creators to register their DNS records while keeping costs low and minimizing configuration changes.

NEW QUESTION 31
A company is using Amazon Route 53 Resolver DNS Firewall in a VPC to block all domains except domains that are on an approved list. The company is concerned that if DNS Firewall is unresponsive, resources in the VPC might be affected if the network cannot resolve any DNS queries. To maintain application service level agreements, the company needs DNS queries to continue to resolve even if Route 53 Resolver does not receive a response from DNS Firewall.
Which change should a network engineer implement to meet these requirements?

A. Update the DNS Firewall VPC configuration to disable fail open for the VPC.
B. Update the DNS Firewall VPC configuration to enable fail open for the VPC.
C. Create a new DHCP options set with parameter dns_firewall_fail_open=fals
D. Associate the new DHCP options set with the VPC.
E. Create a new DHCP options set with parameter dns_firewall_fail_open=tru
F. Associate the new DHCP options set with the VPC.

Answer: B

NEW QUESTION 35
An AWS CloudFormation template is being used to create a VPC peering connection between two existing operational VPCs, each belonging to a different AWS account. All necessary components in the 'Remote' (receiving) account are already in place.
The template below creates the VPC peering connection in the Originating account. It contains these components:
AWSTemplateFormation Version: 2010-09-09 Parameters:
Originating VCId: Type: String RemoteVPCId: Type: String
RemoteVPCAccountId: Type: String Resources:
newVPCPeeringConnection:
Type: 'AWS::EC2::VPCPeeringConnection'
Properties:
VpcdId: !Ref OriginatingVPCId PeerVpcId: !Ref RemoteVPCId PeerOwnerId: !Ref RemoteVPCAccountId
Which additional AWS CloudFormation components are necessary in the Originating account to create an operational cross-account VPC peering connection with AWS CloudFormation? (Select two.)

A. Resources:NewEC2SecurityGroup:Type: AWS::EC2::SecurityGroup
B. Resources:NetworkInterfaceToRemoteVPC:Type: "AWS::EC2NetworkInterface"
C. Resources:newEC2Route:Type: AWS::EC2::Route
D. Resources:VPCGatewayToRemoteVPC:Type: "AWS::EC2::VPCGatewayAttachment"
E. Resources:newVPCPeeringConnection:Type: 'AWS::EC2VPCPeeringConnection'PeerRoleArn: !Ref PeerRoleArn

Answer: CE

Explanation:
https://docs.aws.amazon.com/AWSCloudFormation/latest/UserGuide/AWS_EC2.html

NEW QUESTION 38
A company is using an AWS Site-to-Site VPN connection from the company's on-premises data center to a virtual private gateway in the AWS Cloud Because of congestion, the company is experiencing availability and performance issues as traffic travels across the internet before the traffic reaches AWS. A network engineer must reduce these issues for the connection as quickly as possible with minimum administration effort.
Which solution will meet these requirements?

A. Edit the existing Site-to-Site VPN connection by enabling acceleratio
B. Stop and start the VPN service on the customer gateway for the new setting to take effect.
C. Configure a transit gateway in the same AWS Region as the existing virtual private gatewa
D. Create a new accelerated Site-to-Site VPN connectio
E. Connect the new connection to the transit gateway by using a VPN attachmen
F. Update the customer gateway device to use the new Site to Site VPN connectio
G. Delete the existing Site-to-Site VPN connection
H. Create a new accelerated Site-to-Site VPN connectio
I. Connect the new Site-to-Site VPN connection to the existing virtual private gatewa
J. Update the customer gateway device to use the new Site-to-Site VPN connectio
K. Delete the existing Site-to-Site VPN connection.
L. Create a new AWS Direct Connect connection with a private VIF between the on-premises data center and the AWS Clou
M. Update the customer gateway device to use the new Direct Connect connectio
N. Delete the existing Site-to-Site VPN connection.

Answer: B

NEW QUESTION 42

A company is hosting an application on Amazon EC2 instances behind an Application Load Balancer. The instances are in an Amazon EC2 Auto Scaling group. Because of a recent change to a security group, external users cannot access the application.
A network engineer needs to prevent this downtime from happening again. The network engineer must implement a solution that remediates noncompliant changes to security groups.
Which solution will meet these requirements?

A. Configure Amazon GuardDuty to detect inconsistencies between the desired security group configuration and the current security group configuratio
B. Create an AWS Systems Manager Automation runbook to remediate noncompliant security groups.
C. Configure an AWS Config rule to detect inconsistencies between the desired security group configuration and the current security group configuratio
D. Configure AWS OpsWorks for Chef to remediate noncompliant security groups.
E. Configure Amazon GuardDuty to detect inconsistencies between the desired security group configuration and the current security group configuratio
F. Configure AWS OpsWorks for Chef to remediate noncompliant security groups.
G. Configure an AWS Config rule to detect inconsistencies between the desired security group configuration and the current security group configuratio
H. Create an AWS Systems Manager Automation runbook to remediate noncompliant security groups.

Answer: D

Explanation:
Configuring an AWS Config rule to detect inconsistencies between the desired security group configuration and the current security group configuration would enable evaluation of the compliance status of the security groups based on predefined or custom rules3. Creating an AWS Systems Manager Automation runbook to remediate noncompliant security groups would enable automation of the remediation process2. Additionally, configuring AWS Config to trigger the runbook when a noncompliant change is detected would enable timely and consistent remediation of security group changes.

NEW QUESTION 44
A company's development team has created a new product recommendation web service. The web service is hosted in a VPC with a CIDR block of 192.168.224.0/19. The company has deployed the web service on Amazon EC2 instances and has configured an Auto Scaling group as the target of a Network Load Balancer (NLB).
The company wants to perform testing to determine whether users who receive product recommendations spend more money than users who do not receive product recommendations. The company has a big sales event in 5 days and needs to integrate its existing production environment with the recommendation engine by then. The existing production environment is hosted in a VPC with a CIDR block of 192.168.128 0/17.
A network engineer must integrate the systems by designing a solution that results in the least possible disruption to the existing environments.
Which solution will meet these requirements?

A. Create a VPC peering connection between the web service VPC and the existing production VP
B. Add a routing rule to the appropriate route table to allow data to flow to 192.168.224.0/19 from the existing production environment and to flow to 192.168.128.0/17 from the web service environmen
C. Configure the relevant security groups and ACLs to allow the systems tocommunicate.
D. Ask the development team of the web service to redeploy the web service into the production VPC and integrate the systems there.
E. Create a VPC endpoint servic
F. Associate the VPC endpoint service with the NLB for the web service.Create an interface VPC endpoint for the web service in the existing production VPC.
G. Create a transit gateway in the existing production environmen
H. Create attachments to the production VPC and the web service VP
I. Configure appropriate routing rules in the transit gateway and VPC route tables for 192.168.224.0/19 and 192.168.128.0/17. Configure the relevant security groups and ACLs to allow the systems to communicate.

Answer: C

NEW QUESTION 45
A company has two on-premises data center locations. There is a company-managed router at each data center. Each data center has a dedicated AWS Direct Connect connection to a Direct Connect gateway through a private virtual interface. The router for the first location is advertising 110 routes to the Direct Connect gateway by using BGP, and the router for the second location is advertising 60 routes to the Direct Connect gateway by using BGP. The Direct Connect gateway is attached to a company VPC through a virtual private gateway.
A network engineer receives reports that resources in the VPC are not reachable from various locations in either data center. The network engineer checks the VPC route table and sees that the routes from the first data center location are not being populated into the route table. The network engineer must resolve this issue in the most operationally efficient manner.
What should the network engineer do to meet these requirements?

A. Remove the Direct Connect gateway, and create a new private virtual interface from each company router to the virtual private gateway of the VPC.
B. Change the router configurations to summarize the advertised routes.
C. Open a support ticket to increase the quota on advertised routes to the VPC route table.
D. Create an AWS Transit Gatewa
E. Attach the transit gateway to the VPC, and connect the Direct Connect gateway to the transit gateway.

Answer: B

Explanation:
"If you advertise more than 100 routes each for IPv4 and IPv6 over the BGP session, the BGP session will go into an idle state with the BGP session DOWN."https://docs.aws.amazon.com/directconnect/latest/UserGuide/limits.html

NEW QUESTION 46
A company is planning to create a service that requires encryption in transit. The traffic must not be decrypted between the client and the backend of the service. The company will implement the service by using the gRPC protocol over TCP port 443. The service will scale up to thousands of simultaneous connections. The backend of the service will be hosted on an Amazon Elastic Kubernetes Service (Amazon EKS) duster with the Kubernetes Cluster Autoscaler and the Horizontal Pod Autoscaler configured. The company needs to use mutual TLS for two-way authentication between the client and the backend.
Which solution will meet these requirements?

A. Install the AWS Load Balancer Controller for Kubernete
B. Using that controller, configure a NetworkLoad Balancer with a TCP listener on port 443 to forward traffic to the IP addresses of the backend service Pods.
C. Install the AWS Load Balancer Controller for Kubernete
D. Using that controller, configure an Application Load Balancer with an HTTPS listener on port 443 to forward traffic to the IP addresses of the backend service

Pods.
E. Create a target grou
F. Add the EKS managed node group's Auto Scaling group as a target Create an Application Load Balancer with an HTTPS listener on port 443 to forward traffic to the target group.
G. Create a target grou
H. Add the EKS managed node group’s Auto Scaling group as a targe
I. Create a Network Load Balancer with a TLS listener on port 443 to forward traffic to the target group.

Answer: B

Explanation:
https://docs.aws.amazon.com/elasticloadbalancing/latest/application/load-balancer-target-groups.html#target-gro

NEW QUESTION 50
A company has deployed its AWS environment in a single AWS Region. The environment consists of a few hundred application VPCs, a shared services VPC, and a VPN connection to the company’s on-premises environment. A network engineer needs to implement a transit gateway with the following requirements:
• Application VPCs must be isolated from each other.
• Bidirectional communication must be allowed between the application VPCs and the on-premises network.
• Bidirectional communication must be allowed between the application VPCs and the shared services VPC. The network engineer creates the transit gateway with options disabled for default route table association and default route table propagation. The network engineer also creates the VPN attachment for the on-premises network and creates the VPC attachments for the application VPCs and the shared services VPC.
The network engineer must meet all the requirements for the transit gateway by designing a solution that needs the least number of transit gateway route tables.
Which combination of actions should the network engineer perform to accomplish this goal?(Choose two.)

A. Configure a separate transit gateway route table for on premise
B. Associate the VPN attachment with this transit gateway route tabl
C. Propagate all application VPC attachments to this transit gateway route table.
D. Configure a separate transit gateway route table for each application VP
E. Associate each application VPC attachment with its respective transit gateway route tabl
F. Propagate the shared services VPC attachment and the VPN attachment to this transit gateway route table.
G. Configure a separate transit gateway route table for all application VPC
H. Associate all application VPCs with this transit gateway route tabl
I. Propagate the shared services VPC attachment and the VPNattachment to this transit gateway route table.
J. Configure a separate transit gateway route table for the shared services VP
K. Associate the shared services VPC attachment with this transit gateway route tabl
L. Propagate all application VPC attachments to this transit gateway route table.
M. Configure a separate transit gateway route table for on premises and the shared services VP
N. Associate the VPN attachment and the shared services VPC attachment with this transit gateway route tabl
O. Propagate all application VPC attachments to this transit gateway route table.

Answer: BD

NEW QUESTION 53
A company has a global network and is using transit gateways to connect AWS Regions together. The company finds that two Amazon EC2 instances in different Regions are unable to communicate with each other. A network engineer needs to troubleshoot this connectivity issue.
What should the network engineer do to meet this requirement?

A. Use AWS Network Manager Route Analyzer to analyze routes in the transit gateway route tables and in the VPC route table
B. Use VPC flow logs to analyze the IP traffic that security group rules and network ACL rules accept or reject in the VPC.
C. Use AWS Network Manager Route Analyzer to analyze routes in the transit gateway route tables.Verify that the VPC route tables are correc
D. Use AWS Firewall Manager to analyze the IP traffic that security group rules and network ACL rules accept or reject in the VPC.
E. Use AWS Network Manager Route Analyzer to analyze routes in the transit gateway route tables.Verify that the VPC route tables are correc
F. Use VPC flow logs to analyze the IP traffic that security group rules and network ACL rules accept or reject in the VPC.
G. Use VPC Reachability Analyzer to analyze routes in the transit gateway route table
H. Verify that the VPC route tables are correc
I. Use VPC flow logs to analyze the IP traffic that security group rules and network ACL rules accept or reject in the VPC.

Answer: C

Explanation:
Using AWS Network Manager Route Analyzer to analyze routes in the transit gateway route tables would enable identification of routing issues between VPCs and transit gateways1. Verifying that the VPC route tables are correct would enable identification of routing issues within a VPC. Using VPC flow logs to analyze the IP traffic that security group rules and network ACL rules accept or reject in the VPC would enable identification of traffic filtering issues within a VPC2. Additionally, using VPC Reachability Analyzer to analyze routes in the transit gateway route tables would enable identification of routing issues between transit gateways in different Regions. VPC Reachability Analyzer is a configuration analysis tool that enables connectivity testing between a source resource and a destination resource in your VPCs.

NEW QUESTION 55
A banking company is successfully operating its public mobile banking stack on AWS. The mobile banking stack is deployed in a VPC that includes private subnets and public subnets. The company is using IPv4 networking and has not deployed or supported IPv6 in the environment. The company has decided to adopt a third-party service provider's API and must integrate the API with the existing environment. The service provider’s API requires the use of IPv6.
A network engineer must turn on IPv6 connectivity for the existing workload that is deployed in a private subnet. The company does not want to permit IPv6 traffic from the public internet and mandates that the company's servers must initiate all IPv6 connectivity. The network engineer turns on IPv6 in the VPC and in the private subnets.
Which solution will meet these requirements?

A. Create an internet gateway and a NAT gateway in the VP
B. Add a route to the existing subnet route tables to point IPv6 traffic to the NAT gateway.
C. Create an internet gateway and a NAT instance in the VP
D. Add a route to the existing subnet route tables to point IPv6 traffic to the NAT instance.

E. Create an egress-only Internet gateway in the VPAdd a route to the existing subnet route tables topoint IPv6 traffic to the egress-only internet gateway.
F. Create an egress-only internet gateway in the VP
G. Configure a security group that denies all inbound traffi
H. Associate the security group with the egress-only internet gateway.

Answer: C

NEW QUESTION 56
A company hosts a web application on Amazon EC2 instances behind an Application Load Balancer (ALB). The ALB is the origin in an Amazon CloudFront distribution. The company wants to implement a custom authentication system that will provide a token for its authenticated customers.
The web application must ensure that the GET/POST requests come from authenticated customers before it delivers the content. A network engineer must design a solution that gives the web application the ability to identify authorized customers.
What is the MOST operationally efficient solution that meets these requirements?

A. Use the ALB to inspect the authorized token inside the GET/POST request payloa
B. Use an AWS Lambda function to insert a customized header to inform the web application of an authenticated customer request.
C. Integrate AWS WAF with the ALB to inspect the authorized token inside the GET/POST request payloa
D. Configure the ALB listener to insert a customized header to inform the web application of an authenticated customer request.
E. Use an AWS Lambda@Edge function to inspect the authorized token inside the GET/POST request payloa
F. Use the Lambda@Edge function also to insert a customized header to inform the web application of an authenticated customer request.
G. Set up an EC2 instance that has a third-party packet inspection tool to inspect the authorized token inside the GET/POST request payloa
H. Configure the tool to insert a customized header to inform the web application of an authenticated customer request.

Answer: C

NEW QUESTION 58
A company's network engineer needs to design a new solution to help troubleshoot and detect network anomalies. The network engineer has configured Traffic Mirroring. However, the mirrored traffic is overwhelming the Amazon EC2 instance that is the traffic mirror target. The EC2 instance hosts tools that the company's security team uses to analyze the traffic. The network engineer needs to design a highly available solution that can scale to meet the demand of the mirrored traffic.
Which solution will meet these requirements?

A. Deploy a Network Load Balancer (NLB) as the traffic mirror targe
B. Behind the NL
C. deploy a fleet of EC2 instances in an Auto Scaling grou
D. Use Traffic Mirroring as necessary.
E. Deploy an Application Load Balancer (ALB) as the traffic mirror targe
F. Behind the ALB, deploy a fleet of EC2 instances in an Auto Scaling grou
G. Use Traffic Mirroring only during non-business hours.
H. Deploy a Gateway Load Balancer (GLB) as the traffic mirror targe
I. Behind the GL
J. deploy a fleet of EC2 instances in an Auto Scaling grou
K. Use Traffic Mirroring as necessary.
L. Deploy an Application Load Balancer (ALB) with an HTTPS listener as the traffic mirror targe
M. Behind the AL
N. deploy a fleet of EC2 instances in an Auto Scaling grou
O. Use Traffic Mirroring only during active events or business hours.

Answer: A

NEW QUESTION 62
A company operates its IT services through a multi-site hybrid infrastructure. The company deploys resources on AWS in the us-east-1 Region and in the eu-west-2 Region. The company also deploys resources in its own data centers that are located in the United States (US) and in the United Kingdom (UK). In both AWS Regions, the company uses a transit gateway to connect 15 VPCs to each other. The company has created a transit gateway peering connection between the two transit gateways. The VPC CIDR blocks do not overlap with each other or with IP addresses used within the data centers. The VPC CIDR prefixes can also be aggregated either on a Regional level or for the company's entire AWS environment.
The data centers are connected to each other by a private WAN connection. IP routing information is exchanged dynamically through Interior BGP (iBGP) sessions. The data centers maintain connectivity to AWS through one AWS Direct Connect connection in the US and one Direct Connect connection in the UK. Each Direct Connect connection is terminated on a Direct Connect gateway and is associated with a local transit gateway through a transit VIF.
Traffic follows the shortest geographical path from source to destination. For example, packets from the UK data center that are targeted to resources in eu-west-2 travel across the local Direct Connect connection. In cases of cross-Region data transfers, such as from the UK data center to VPCs in us-east-1, the private WAN connection must be used to minimize costs on AWS. A network engineer has configured each transit gateway association on the Direct Connect gateway to advertise VPC-specific CIDR IP prefixes only from the local Region. The routes toward the other Region must be learned through BGP from the routers in the other data center in the original, non-aggregated form.
The company recently experienced a problem with cross-Region data transfers because of issues with its private WAN connection. The network engineer needs to modify the routing setup to prevent similar interruptions in the future. The solution cannot modify the original traffic routing goal when the network is operating normally.
Which modifications will meet these requirements? (Choose two.)

A. Remove all the VPC CIDR prefixes from the list of subnets advertised through the local Direct Connect connectio
B. Add the company's entire AWS environment aggregate route to the list of subnets advertised through the local Direct Connect connection.
C. Add the CIDR prefixes from the other Region VPCs and the local VPC CIDR blocks to the list of subnets advertised through the local Direct Connect connectio
D. Configure data center routers to make routing decisions based on the BGP communities received.
E. Add the aggregate IP prefix for the other Region and the local VPC CIDR blocks to the list of subnets advertised through the local Direct Connect connection.
F. Add the aggregate IP prefix for the company's entire AWS environment and the local VPC CIDR blocks to the list of subnets advertised through the local Direct Connect connection.
G. Remove all the VPC CIDR prefixes from the list of subnets advertised through the local Direct Connect connectio
H. Add both Regional aggregate IP prefixes to the list of subnets advertised through the Direct Connect connection on both sides of the networ
I. Configure data center routers to make routing decisions based on the BGP communities received.

Answer: AD

NEW QUESTION 66
A Network Engineer is provisioning a subnet for a load balancer that will sit in front of a fleet of application servers in a private subnet. There is limited IP space left in the VPC CIDR. The application has few users now but is expected to grow quickly to millions of users.
What design will use the LEAST amount of IP space, while allowing for this growth?

A. Use two /29 subnets for an Application Load Balancer in different Availability Zones.
B. Use one /29 subnet for the Network Load Balance
C. Add another VPC CIDR to the VPC to allow for future growth.
D. Use two /28 subnets for a Network Load Balancer in different Availability Zones.
E. Use one /28 subnet for an Application Load Balance
F. Add another VPC CIDR to the VPC to allow for future growth.

Answer: C

NEW QUESTION 71
A company uses a 4 Gbps AWS Direct Connect dedicated connection with a link aggregation group (LAG) bundle to connect to five VPCs that are deployed in the us-east-1 Region. Each VPC serves a different business unit and uses its own private VIF for connectivity to the on-premises environment. Users are reporting slowness when they access resources that are hosted on AWS.
A network engineer finds that there are sudden increases in throughput and that the Direct Connect connection becomes saturated at the same time for about an hour each business day. The company wants to know which business unit is causing the sudden increase in throughput. The network engineer must find out this information and implement a solution to resolve the problem.
Which solution will meet these requirements?

A. Review the Amazon CloudWatch metrics for VirtualInterfaceBpsEgress and VirtualInterfaceBpsIngress to determine which VIF is sending the highest throughput during the period in which slowness is observe
B. Create a new 10 Gbps dedicated connectio
C. Shift traffic from the existing dedicated connection to the new dedicated connection.
D. Review the Amazon CloudWatch metrics for VirtualInterfaceBpsEgress and VirtualInterfaceBpsIngress to determine which VIF is sending the highest throughput during the period in which slowness is observe
E. Upgrade the bandwidth of the existing dedicated connection to 10 Gbps.
F. Review the Amazon CloudWatch metrics for ConnectionBpsIngress and ConnectionPpsEgress to determine which VIF is sending the highest throughput during the period in which slowness is observe
G. Upgrade the existing dedicated connection to a 5 Gbps hosted connection.
H. Review the Amazon CloudWatch metrics for ConnectionBpsIngress and ConnectionPpsEgress to determine which VIF is sending the highest throughput during the period in which slowness is observed.Create a new 10 Gbps dedicated connectio
I. Shift traffic from the existing dedicated connection to the new dedicated connection.

Answer: A

Explanation:
To meet the requirements of finding out which business unit is causing the sudden increase in throughput and resolving the problem, the network engineer should review the Amazon CloudWatch metrics for VirtualInterfaceBpsEgress and VirtualInterfaceBpsIngress to determine which VIF is sending the highest throughput during the period in which slowness is observed (Option B). After identifying the VIF that is causing the issue, they can upgrade the bandwidth of the existing dedicated connection to 10 Gbps to resolve the problem (Option B).

NEW QUESTION 73
A company has deployed an application in a VPC that uses a NAT gateway for outbound traffic to the internet. A network engineer notices a large quantity of suspicious network traffic that is traveling from the VPC over the internet to IP addresses that are included on a deny list. The network engineer must implement a solution to determine which AWS resources are generating the suspicious traffic. The solution must minimize cost and administrative overhead.
Which solution will meet these requirements?

A. Launch an Amazon EC2 instance in the VP
B. Use Traffic Mirroring by specifying the NAT gateway as the source and the EC2 instance as the destinatio
C. Analyze the captured traffic by using open-source tools to identify the AWS resources that are generating the suspicious traffic.
D. Use VPC flow log
E. Launch a security information and event management (SIEM) solution in the VP
F. Configure the SIEM solution to ingest the VPC flow log
G. Run queries on the SIEM solution to identify the AWS resources that are generating the suspicious traffic.
H. Use VPC flow log
I. Publish the flow logs to a log group in Amazon CloudWatch Log
J. Use CloudWatch Logs Insights to query the flow logs to identify the AWS resources that are generating the suspicious traffic.
K. Configure the VPC to stream the network traffic directly to an Amazon Kinesis data strea
L. Send the data from the Kinesis data stream to an Amazon Kinesis Data Firehose delivery stream to store the data in Amazon S3. Use Amazon Athena to query the data to identify the AWS resources that are generating the suspicious traffic.

Answer: C

NEW QUESTION 77
A bank built a new version of its banking application in AWS using containers that content to an on-premises database over VPN connection. This application version requires users to also update their client application. The bank plans to deprecate the earlier client version. However, the company wants to keep supporting earlier clients through their on-premises version of the application to serve a small portion of the customers who haven’t yet upgraded.
What design will allow the company to serve both newer and earlier clients in the MOST efficient way?

A. Use an Amazon Route 53 multivalue answer routing policy to route older client traffic to the on-premises application version and the rest of the traffic to the new AWS based version.
B. Use a Classic Load Balancer for the new applicatio
C. Route all traffic to the new application by using an Elastic Load Balancing (ELB) load balancer DN

D. Define a user-agent-based rule on the backend servers to redirect earlier clients to the on-premises application.
E. Use an Application Load Balancer for the new applicatio
F. Register both the new and earlier applications as separate target groups and use path-based routing to route traffic based on the application version.
G. Use an Application Load Balancer for the new applicatio
H. Register both the new and earlier application backends as separate target group
I. Use header-based routing to route traffic based on the application version.

Answer: D

NEW QUESTION 79
A company wants to improve visibility into its AWS environment. The AWS environment consists of multiple VPCs that are connected to a transit gateway. The transit gateway connects to an on-premises data center through an AWS Direct Connect gateway and a pair of redundant Direct Connect connections that use transit VIFs. The company must receive notification each time a new route is advertised to AWS from on premises over Direct Connect.
What should a network engineer do to meet these requirements?

A. Enable Amazon CloudWatch metrics on Direct Connect to track the received route
B. Configure a CloudWatch alarm to send notifications when routes change.
C. Onboard Transit Gateway Network Manager to Amazon CloudWatch Logs Insight
D. Use Amazon EventBridge (Amazon CloudWatch Events) to send notifications when routes change.
E. Configure an AWS Lambda function to periodically check the routes on the Direct Connect gateway and to send notifications when routes change.
F. Enable Amazon CloudWatch Logs on the transit VIFs to track the received route
G. Create a metric filter Set an alarm on the filter to send notifications when routes change.

Answer: B

Explanation:
https://docs.aws.amazon.com/network-manager/latest/cloudwan/cloudwan-cloudwatch-events.html
To receive notification each time a new route is advertised to AWS from on premises over Direct Connect, a network engineer should onboard Transit Gateway Network Manager to Amazon CloudWatch Logs Insights and use Amazon EventBridge (Amazon CloudWatch Events) to send notifications when routes change (Option B). This solution allows for real-time monitoring of route changes and automatic notification when new routes are advertised.

NEW QUESTION 81
A company has multiple AWS accounts. Each account contains one or more VPCs. A new security guideline requires the inspection of all traffic between VPCs. The company has deployed a transit gateway that provides connectivity between all VPCs. The company also has deployed a shared services VPC with Amazon EC2 instances that include IDS services for stateful inspection. The EC2 instances are deployed across three Availability Zones. The company has set up VPC associations and routing on the transit gateway. The company has migrated a few test VPCs to the new solution for traffic inspection.
Soon after the configuration of routing, the company receives reports of intermittent connections for traffic that crosses Availability Zones.
What should a network engineer do to resolve this issue?

A. Modify the transit gateway VPC attachment on the shared services VPC by enabling cross-Availability Zone load balancing.
B. Modify the transit gateway VPC attachment on the shared services VPC by enabling appliance mode support.
C. Modify the transit gateway by selecting VPN equal-cost multi-path (ECMP) routing support.
D. Modify the transit gateway by selecting multicast support.

Answer: B

Explanation:
To resolve the issue of intermittent connections for traffic that crosses Availability Zonesafter configuring routing for traffic inspection between VPCs using a transit gateway and EC2 instances with IDS services in a shared services VPC, a network engineer should modify the transit gateway VPC attachment on the shared services VPC by enabling appliance mode support (Option B). This will ensure that traffic is routed to the same EC2 instance for stateful inspection and prevent intermittent connections.

NEW QUESTION 83
A company's AWS architecture consists of several VPCs. The VPCs include a shared services VPC and several application VPCs. The company has established network connectivity from all VPCs to the
on-premises DNS servers.
Applications that are deployed in the application VPCs must be able to resolve DNS for internally hosted domains on premises. The applications also must be able to resolve local VPC domain names and domains that are hosted in Amazon Route 53 private hosted zones.
What should a network engineer do to meet these requirements?

A. Create a new Route 53 Resolver inbound endpoint in the shared services VP
B. Create forwarding rules for the on-premises hosted domain
C. Associate the rules with the new Resolver endpoint and each application VP
D. Update each application VPC's DHCP configuration to point DNS resolution to the new Resolver endpoint.
E. Create a new Route 53 Resolver outbound endpoint in the shared services VP
F. Create forwarding rules for the on-premises hosted domain
G. Associate the rules with the new Resolver endpoint and each application VPC.
H. Create a new Route 53 Resolver outbound endpoint in the shared services VPCreate forwarding rules for the on-premises hosted domain
I. Associate the rules with the new Resolver endpoint and each application VPUpdate each application VPC's DHCP configuration to point DNS resolution to the new Resolver endpoint.
J. Create a new Route 53 Resolver inbound endpoint in the shared services VP
K. Create forwarding rules for the on-premises hosted domain
L. Associate the rules with the new Resolver endpoint and each application VPC.

Answer: B

Explanation:
Creating a new Route 53 Resolver outbound endpoint in the shared services VPC would enable forwarding of DNS queries from the VPC to on-premises1. Creating forwarding rules for the on-premises hosted domains would enable specifying which domain names are forwarded to the on-premises DNS servers2. Associating the rules with the new Resolver endpoint and each application VPC would enable applying the rules to the VPCs2. This solution would not affect the

default DNS resolution behavior of Route 53 Resolver for local VPC domain names and domains that are hosted in Route 53 private hosted zones3.

NEW QUESTION 88

A company has several production applications across different accounts in the AWS Cloud. The company operates from the us-east-1 Region only. Only certain partner companies can access the applications. The applications are running on Amazon EC2 instances that are in an Auto Scaling group behind an Application Load Balancer (ALB). The EC2 instances are in private subnets and allow traffic only from the ALB. The ALB is in a public subnet and allows inbound traffic only from partner network IP address ranges over port 80.

When the company adds a new partner, the company must allow the IP address range of the partner network in the security group that is associated with the ALB in each account. A network engineer must implement a solution to centrally manage the partner network IP address ranges.

Which solution will meet these requirements in the MOST operationally efficient manner?

A. Create an Amazon DynamoDB table to maintain all IP address ranges and security groups that need to be update
B. Update the DynamoDB table with the new IP address range when the company adds a new partne
C. Invoke an AWS Lambda function to read new IP address ranges and security groups from the DynamoDB table to update the security group
D. Deploy this solution in all accounts.
E. Create a new prefix lis
F. Add all allowed IP address ranges to the prefix lis
G. Use Amazon EventBridge (Amazon CloudWatch Events) rules to invoke an AWS Lambda function to update security groups whenever a new IP address range is added to the prefix lis
H. Deploy this solution in all accounts.
I. Create a new prefix lis
J. Add all allowed IP address ranges to the prefix lis
K. Share the prefix list across different accounts by using AWS Resource Access Manager (AWS RAM). Update security groups to use the prefix list instead of the partner IP address rang
L. Update the prefix list with the new IP address range when the company adds a new partner.
M. Create an Amazon S3 bucket to maintain all IP address ranges and security groups that need to be update
N. Update the S3 bucket with the new IP address range when the company adds a new partne
O. Invoke an AWS Lambda function to read new IP address ranges and security groups from the S3 bucket to update the security group
P. Deploy this solution in all accounts.

Answer: C

Explanation:

Creating a new prefix list and adding all allowed IP address ranges to the prefix list would enable grouping of CIDR blocks that can be referenced in security group rules3. Sharing the prefix list across different accounts by using AWS Resource Access Manager (AWS RAM)would enable central management of the partner network IP address ranges5. Updating security groups to use the prefix list instead of the partner IP address range would enable simplification of security group rules3. Updating the prefix list with the new IP address range when the company adds a new partner would enable automatic propagation of the changes to all security groups that use the prefix list3.

NEW QUESTION 91

A security team is performing an audit of a company's AWS deployment. The security team is concerned that two applications might be accessing resources that should be blocked by network ACLs and security groups. The applications are deployed across two Amazon Elastic Kubernetes Service (Amazon EKS) clusters that use the Amazon VPC Container Network Interface (CNI) plugin for Kubernetes. The clusters are in separate subnets within the same VPC and have a Cluster Autoscaler configured.

The security team needs to determine which POD IP addresses are communicating with which services throughout the VPC. The security team wants to limit the number of flow logs and wants to examine the traffic from only the two applications.

Which solution will meet these requirements with the LEAST operational overhead?

A. Create VPC flow logs in the default forma
B. Create a filter to gather flow logs only from the EKS nodes.Include the srcaddr field and the dstaddr field in the flow logs.
C. Create VPC flow logs in a custom forma
D. Set the EKS nodes as the resource Include the pkt-srcaddr field and the pkt-dstaddr field in the flow logs.
E. Create VPC flow logs in a custom forma
F. Set the application subnets as resource
G. Include the pkt-srcaddr field and the pkt-dstaddr field in the flow logs.
H. Create VPC flow logs in a custom forma
I. Create a filter to gather flow logs only from the EKS nodes.Include the pkt-srcaddr field and the pkt-dstaddr field in the flow logs.

Answer: D

NEW QUESTION 96

A company delivers applications over the internet. An Amazon Route 53 public hosted zone is the
authoritative DNS service for the company and its internet applications, all of which are offered from the same domain name.

A network engineer is working on a new version of one of the applications. All the application's components are hosted in the AWS Cloud. The application has a three-tier design. The front end is delivered through Amazon EC2 instances that are deployed in public subnets with Elastic IP addresses assigned. The backend components are deployed in private subnets from RFC1918.

Components of the application need to be able to access other components of the application within the application's VPC by using the same host names as the host names that are used over the public internet. The network engineer also needs to accommodate future DNS changes, such as the introduction of new host names or the retirement of DNS entries.

Which combination of steps will meet these requirements? (Choose three.)

A. Add a geoproximity routing policy in Route 53.
B. Create a Route 53 private hosted zone for the same domain name Associate the application’s VPC with the new private hosted zone.
C. Enable DNS hostnames for the application's VPC.
D. Create entries in the private hosted zone for each name in the public hosted zone by using the corresponding private IP addresses.
E. Create an Amazon EventBridge (Amazon CloudWatch Events) rule that runs when AWS CloudTrail logs a Route 53 API call to the public hosted zon
F. Create an AWS Lambda function as the target of the rul
G. Configure the function to use the event information to update the privatehosted zone.
H. Add the private IP addresses in the existing Route 53 public hosted zone.

Answer: BCD

NEW QUESTION 98
A company uses AWS Direct Connect to connect its corporate network to multiple VPCs in the same AWS account and the same AWS Region. Each VPC uses its own private VIF and its own virtual LAN on the Direct Connect connection. The company has grown and will soon surpass the limit of VPCs and private VIFs for each connection.
What is the MOST scalable way to add VPCs with on-premises connectivity?

A. Provision a new Direct Connect connection to handle the additional VPC
B. Use the new connection to connect additional VPCs.
C. Create virtual private gateways for each VPC that is over the service quot
D. Use AWS Site-to-Site VPNto connect the virtual private gateways to the corporate network.
E. Create a Direct Connect gateway, and add virtual private gateway associations to the VPC
F. Configure a private VIF to connect to the corporate network.
G. Create a transit gateway, and attach the VPC
H. Create a Direct Connect gateway, and associate it with the transit gatewa
I. Create a transit VIF to the Direct Connect gateway.

Answer: D

Explanation:
When a company requires connectivity to multiple VPCs over AWS Direct Connect, a scalable solution is to use a transit gateway. A transit gateway is a hub that can interconnect multiple VPCs and VPN connections. The VPCs can communicate with each other over the transitgateway, and on-premises networks can communicate with the VPCs through the Direct Connect gateway. This solution provides a central point of management and simplifies the configuration of network routing. By associating the Direct Connect gateway with the transit gateway, traffic between the VPCs and the on-premises network can be routed through the Direct Connect connection.

NEW QUESTION 103
A network engineer has deployed an Amazon EC2 instance in a private subnet in a VPC. The VPC has no public subnet. The EC2 instance hosts application code that sends messages to an Amazon Simple Queue Service (Amazon SQS) queue. The subnet has the default network ACL with no modification applied. The EC2 instance has the default security group with no modification applied.
The SQS queue is not receiving messages.
Which of the following are possible causes of this problem? (Choose two.)

A. The EC2 instance is not attached to an IAM role that allows write operations to Amazon SQS.
B. The security group is blocking traffic to the IP address range used by Amazon SQS
C. There is no interface VPC endpoint configured for Amazon SQS
D. The network ACL is blocking return traffic from Amazon SQS
E. There is no route configured in the subnet route table for the IP address range used by Amazon SQS

Answer: CE

NEW QUESTION 107
An ecommerce company is hosting a web application on Amazon EC2 instances to handle continuously changing customer demand. The EC2 instances are part of an Auto Scaling group. The company wants to implement a solution to distribute traffic from customers to the EC2 instances. The company must encrypt all traffic at all stages between the customers and the application servers. No decryption at intermediate points is allowed.
Which solution will meet these requirements?

A. Create an Application Load Balancer (ALB). Add an HTTPS listener to the AL
B. Configure the Auto Scaling group to register instances with the ALB's target group.
C. Create an Amazon CloudFront distributio
D. Configure the distribution with a custom SSL/TLS certificat
E. Set the Auto Scaling group as the distribution's origin.
F. Create a Network Load Balancer (NLB). Add a TCP listener to the NL
G. Configure the Auto Scaling group to register instances with the NLB's target group.
H. Create a Gateway Load Balancer (GLB). Configure the Auto Scaling group to register instances with the GLB's target group.

Answer: C

Explanation:
To distribute traffic from customers to EC2 instances in an Auto Scaling group and encrypt all traffic at all stages between the customers and the application servers without decryption at intermediate points, the company should create a Network Load Balancer (NLB) with a TCP listener and configure the Auto Scaling group to register instances with the NLB's target group (Option C). This solution allows for end-to-end encryption of traffic without decryption at intermediate points.

NEW QUESTION 111
A company is running multiple workloads on Amazon EC2 instances in public subnets. In a recent incident, an attacker exploited an application vulnerability on one of the EC2 instances to gain access to the instance. The company fixed the application and launched a replacement EC2 instance that contains the updated application.
The attacker used the compromised application to spread malware over the internet. The company became aware of the compromise through a notification from AWS. The company needs the ability to identify when an application that is deployed on an EC2 instance is spreading malware.
Which solution will meet this requirement with the LEAST operational effort?

A. Use Amazon GuardDuty to analyze traffic patterns by inspecting DNS requests and VPC flow logs.
B. Use Amazon GuardDuty to deploy AWS managed decoy systems that are equipped with the most recent malware signatures.
C. Set up a Gateway Load Balance
D. Run an intrusion detection system (IDS) appliance from AWS Marketplace on Amazon EC2 for traffic inspection.
E. Configure Amazon Inspector to perform deep packet inspection of outgoing traffic.

Answer: A

Explanation:
This solution involves using Amazon GuardDuty to monitor network traffic and analyze DNS requests and VPC flow logs for suspicious activity. This will allow the company to identify when an application is spreading malware by monitoring the network traffic patterns associated with the instance. GuardDuty is a fully managed threat detection service that continuously monitors for malicious activity and unauthorized behavior in your AWS accounts and workloads. It requires minimal setup and configuration and can be integrated with other AWS services for automated remediation. This solution requires the least operational effort compared to the other options

NEW QUESTION 115
A network engineer is designing the architecture for a healthcare company's workload that is moving to the AWS Cloud. All data to and from the on-premises environment must be encrypted in transit. All traffic also must be inspected in the cloud before the traffic is allowed to leave the cloud and travel to the on-premises environment or to the internet.
The company will expose components of the workload to the internet so that patients can reserve appointments. The architecture must secure these components and protect them against DDoS attacks. The architecture also must provide protection against financial liability for services that scale out during a DDoS event.
Which combination of steps should the network engineer take to meet all these requirements for the workload? (Choose three.)

A. Use Traffic Mirroring to copy all traffic to a fleet of traffic capture appliances.
B. Set up AWS WAF on all network components.
C. Configure an AWS Lambda function to create Deny rules in security groups to block malicious IP addresses.
D. Use AWS Direct Connect with MACsec support for connectivity to the cloud.
E. Use Gateway Load Balancers to insert third-party firewalls for inline traffic inspection.
F. Configure AWS Shield Advanced and ensure that it is configured on all public assets.

Answer: DEF

Explanation:
To meet the requirements for the healthcare company’s workload that is moving to the AWS Cloud, the network engineer should take the following steps:

- Use AWS Direct Connect with MACsec support for connectivity to the cloud to ensure that all data to and from the on-premises environment is encrypted in transit (Option D).
- Use Gateway Load Balancers to insert third-party firewalls for inline traffic inspection to inspect all traffic in the cloud before it is allowed to leave (Option E).
- Configure AWS Shield Advanced and ensure that it is configured on all public assets to secure components exposed to the internet against DDoS attacks and provide protection against financial liability for services that scale out during a DDoS event (Option F).

These steps will help ensure that all data is encrypted in transit, all traffic is inspected before leaving the cloud, and components exposed to the internet are secured against DDoS attacks.

NEW QUESTION 119
......