**CloudFront**

1. A user of your web-site makes an HTTP request to access a static resource on your server. The request is automatically redirected to the nearest CloudFront server. For some reason, the requested resource does not exist on the CloudFront server. Which of the following is true?
   1. The request will put on hold until the resource has been cached at the edge location.
   2. Your user will receive 404 error.
   3. Cloudfront will query the origin server and then cache the resource on the edge location.
   4. The request will be sent to the nearest edge locations that contains that resource
2. A company's website runs on Amazon EC2 instances behind an Application Load Balancer (ALB) The website has a mix of dynamic and static content Users around the globe are reporting that the website is slow Which set of actions will improve website performance for users worldwide?
   1. Create an Amazon CloudFront distribution and configure the ALB as an origin Then update the Amazon Route 53 record to point to the CloudFront distribution
   2. Create a latency-based Amazon Route 53 record for the ALB Then launch new EC2 instances with larger instance sizes and register the instances with the ALB
   3. EC2 instances hosting the same web application in different Regions closer to the users.Then register the instances with the same ALB using cross-Region VPC peering
   4. Host the website in an Amazon S3 bucket in the Regions closest to the users and delete the ALB and EC2 instances Then update an Amazon Route 53 record to point to the S3 buckets
3. A solutions architect is optimizing a website for an upcoming musical event Videos of the performances will be streamed in real time and then will be available on demand The event is expected to attract a global online audience Which service will improve the performance of both the real-time and on-demand streaming?
   1. Amazon CloudFront
   2. AWS Global Accelerator
   3. Amazon Route 53
   4. Amazon S3 Transfer Acceleration
4. Which one of the below doesn't affect Amazon CIoudFront billing?

A. Data Transfer Out

B. Dedicated IP SSL Certificates

C. Requests

D. Distribution Type

1. An edge location refers to which Amazon Web Service?

A. An edge location is refered to the network configured within a Zone or Region

B. An edge location is an AWS Region

C. An edge location is the location of the data center used for Amazon CIoudFront.

D. An edge location is a Zone within an AWS Region

Amazon CloudFront is a web service that gives businesses and web application developers an easy and cost effective way to distribute content with low latency and high data transfer speeds. Like other AWS services, Amazon CloudFront is a self-service, pay-per-use offering, requiring no long term commitments or minimum fees. With CloudFront, your files are delivered to end-users using a global network of edge locations.

**What can I do with Amazon CloudFront?**

Amazon CloudFront provides a simple API that lets you:

Distribute content with low latency and high data transfer rates by serving requests using a network of edge locations around the world. Get started without negotiating contracts and minimum commitments.

**How does Amazon CloudFront provide higher performance?**

Amazon CloudFront employs a global network of edge locations and regional edge caches that cache copies of your content close to your viewers. Amazon CloudFront ensures that end-user requests are served by the closest edge location. As a result, viewer requests travel a short distance, improving performance for your viewers. For files not cached at the edge locations and the regional edge caches, Amazon CloudFront keeps persistent connections with your origin servers so that those files can be fetched from the origin servers as quickly as possible. Finally, Amazon CloudFront uses additional optimizations – e.g. wider TCP initial congestion window – to provide higher performance while delivering your content to viewers.

**How is Amazon CloudFront different from Amazon S3?**

Amazon CloudFront is a good choice for distribution of frequently accessed static content that benefits from edge delivery—like popular website images, videos, media files or software downloads.

**What types of content does Amazon CloudFront support?**

Amazon CloudFront supports content that can be sent using the HTTP or WebSocket protocols. This includes dynamic web pages and applications, such as HTML or PHP pages or WebSocket-based applications, and any popular static files that are a part of your web application, such as website images, audio, video, media files or software downloads. Amazon CloudFront also supports delivery of live or on-demand media streaming over HTTP.

Amazon CloudFront currently supports GET, HEAD, POST, PUT, PATCH, DELETE and OPTIONS requests.

**What is Field-Level Encryption?**

Field-Level Encryption is a feature of CloudFront that allows you to securely upload user-submitted data such as credit card numbers to your origin servers. Using this functionality, you can further encrypt sensitive data in an HTTPS form using field-specific encryption keys (which you supply) before a PUT/ POST request is forwarded to your origin. This ensures that sensitive data can only be decrypted and viewed by certain components or services in your application stack. To learn more about field-level encryption, see Field-Level Encryption in our documentation.

**How can I protect my web applications delivered via CloudFront?**

You can integrate your CloudFront distribution with AWS WAF, a web application firewall that helps protect web applications from attacks by allowing you to configure rules based on IP addresses, HTTP headers, and custom URI strings. Using these rules, AWS WAF can block, allow, or monitor (count) web requests for your web application. Please see AWS WAF Developer Guide for more information

**Can I use Amazon CloudFront if I expect usage peaks higher than 150 Gbps or 250,000 RPS?**

Yes. Complete our request for higher limits here, and we will add more capacity to your account within two business days

**What is the maximum size of a file that can be delivered through Amazon CloudFront?**

The maximum size of a single file that can be delivered through Amazon CloudFront is 20 GB. This limit applies to all Amazon CloudFront distributions. CloudFront provides two ways to log the requests that are delivered from your distributions: **Standard logs** and **Real-time logs.**

Data Transfer Out, HTTP/HTTPS Requests, Invalidation Requests, and Dedicated IP Custom SSL certificates associated with a CloudFront distribution

**UseCases**

Accelerate static website content delivery

Serve video on demand or live streaming video

Encrypt specific fields throughout system processing

Customize at the edge

Serve private content by using Lambda@Edge customizations

|  |  |  |
| --- | --- | --- |
| No | Answer | Explanation |
| 1 | C |  |
| 2 | A |  |
| 3 | A |  |
| 4 | A | Amazon CIoudFront is a web service for content delivery. C|oudFront delivers your content using a global network of edge locations and works seamlessly with Amazon S3 which durably stores the original and definitive versions of your files.  Amazon CIoudFront billing is maily affected by Data Transfer Out Edge Location Traffic Distribution Requests Dedicated IP SSL Certificates |
| 5 | C | Amazon CIoudFront is a content distribution network. A content delivery network or content distribution network (CDN) is a large distributed system of sewers deployed in multiple data centers across the world. The location of the data center used for CDN is called edge location.  Amazon CIoudFront can cache static content at each edge location. This means that your popular static content (e.g., your site’s logo, navigational images, cascading style sheets, JavaScript code, etc.) will be available at a nearby edge location for the browsers to download with low latency and improved performance for viewers. Caching popular static content with Amazon CIoudFront also helps you offload requests for such files from your origin sever — CIoudFront serves the cached copy when available and only makes a request to your origin server if the edge location receMng the browser’s request does not have a copy of the file |
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