You are configuring a web app that delivers streaming video to users.
You need to ensure that the users streaming experience is constant.
You also want to configure the application to store data in a geographic location that is nearest to the user.
To achieve the requirement, you include the use of Azure Redis Cache in your design.
Did you achieve the requirement?

- Yes
- **No**

Correct

Azure Redis Cache is used for server side caching. Instead, you can use Content Delivery Network (CDN). A content delivery network (CDN) is a distributed network of servers that can efficiently deliver web content to users. CDNs store cached content on edge servers that are close to end users to minimize latency.
https://docs.microsoft.com/en-us/azure/architecture/best-practices/cdn

You are configuring a web app that delivers streaming video to users.
You need to ensure that the users streaming experience is constant.
You also want to configure the application to store data in a geographic location that is nearest to the user.
To achieve the requirement, you include the use of an Azure Content Delivery Network (CDN) in your design.
Did you achieve the requirement?

- **Yes**
- No

Correct

You can use Content Delivery Network (CDN). A content delivery network (CDN) is a distributed network of servers that can efficiently deliver web content to users. CDNs store cached content on edge servers that are close to end users to minimize latency.
https://docs.microsoft.com/en-us/azure/architecture/best-practices/cdn

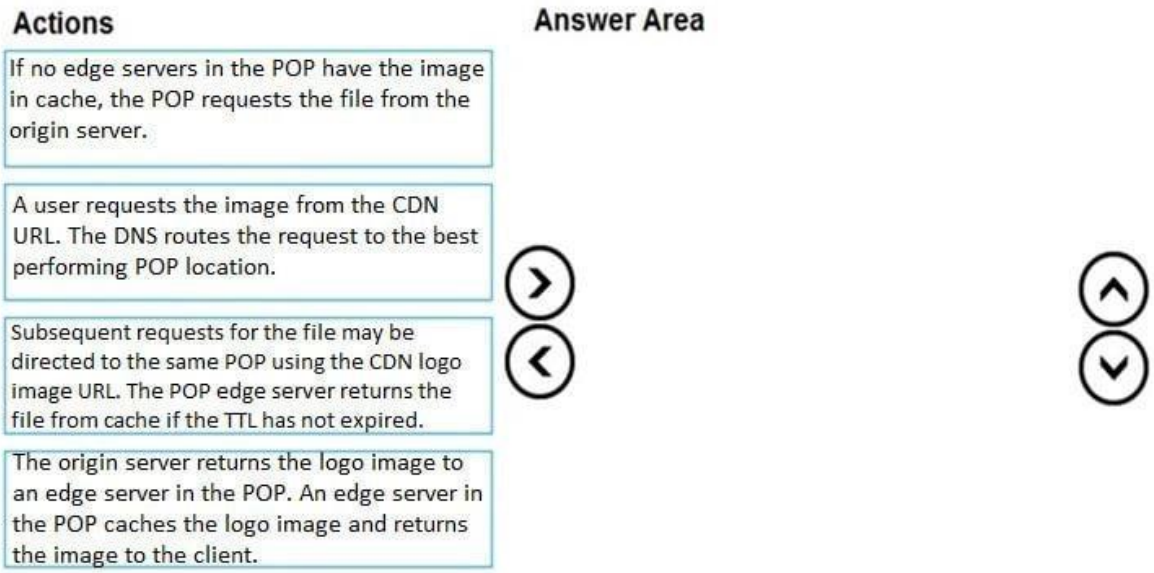
You are configuring a web app that delivers streaming video to users.
You need to ensure that the users streaming experience is constant.
You also want to configure the application to store data in a geographic location that is nearest to the user.
To achieve the requirement, you include the use of a Storage Area Network (SAN) in your design.
Did you achieve the requirement?

- Yes
- **No**

Correct

SAN storage is to store files on a server. Instead, you can use Content Delivery Network (CDN). A content delivery network (CDN) is a distributed network of servers that can efficiently deliver web content to users. CDNs store cached content on edge servers that are close to end users to minimize latency.
https://docs.microsoft.com/en-us/azure/architecture/best-practices/cdn

DRAG DROP –
Your company has several websites that use a company logo image. You use Azure Content Delivery Network (CDN) to store the static image.
You need to determine the correct process of how the CDN and the Point of Presence (POP) server will distribute the image and list the items in the correct order.
In which order do the actions occur? To answer, move all actions from the list of actions to the answer area and arrange them in the correct order.
Select and Place:



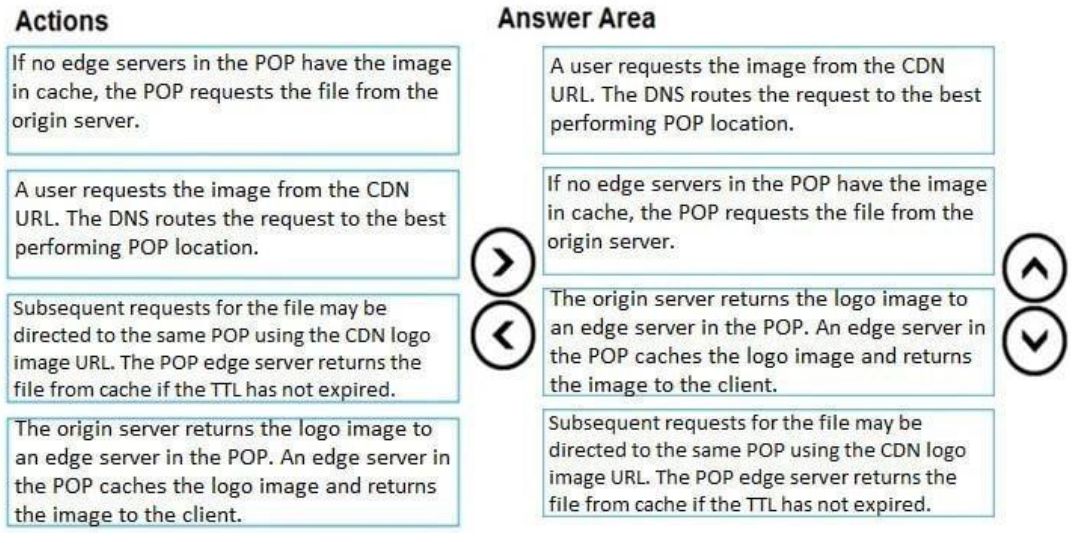
- **Box 2**
  Box 1
  Box 4
  Box 3

- Box 2
  Box 4
  Box 1
  Box 3

- Box 2
  Box 1
  Box 3
  Box 4

- Box 4
  Box 1
  Box 3
  Box 2

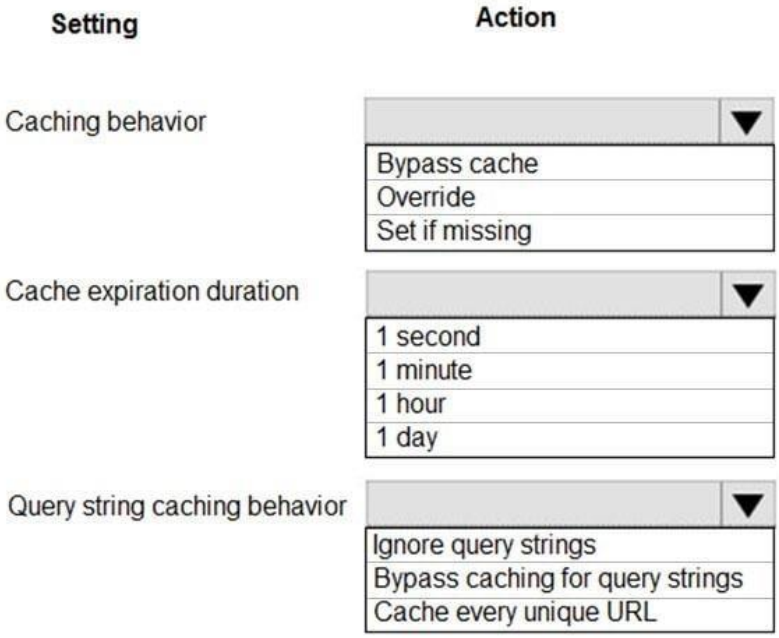
Correct



Step 1: A user requests the image..
A user requests a file (also called an asset) by using a URL with a special domain name, such as .azureedge.net. This name can be an endpoint hostname or a custom domain. The DNS routes the request to the best performing POP location, which is usually the POP that is geographically closest to the user.
Step 2: If no edge servers in the POP have the..
If no edge servers in the POP have the file in their cache, the POP requests the file from the origin server. The origin server can be an Azure Web App, Azure
Cloud Service, Azure Storage account, or any publicly accessible web server.
Step 3: The origin server returns the..
The origin server returns the file to an edge server in the POP.
An edge server in the POP caches the file and returns the file to the original requestor (Alice). The file remains cached on the edge server in the POP until the time-to-live (TTL) specified by its HTTP headers expires. If the origin server didn‘t specify a TTL, the default TTL is seven days.
Step 4: Subsequent requests for..
Additional users can then request the same file by using the same URL that the original user used, and can also be directed to the same POP.
If the TTL for the file hasn‘t expired, the POP edge server returns the file directly from the cache. This process results in a faster, more responsive user experience.
Reference:
https://docs.microsoft.com/en-us/azure/cdn/cdn-overview

HOTSPOT –
You are developing an Azure App Service hosted ASP.NET Core web app to deliver video-on-demand streaming media. You enable an Azure Content Delivery
Network (CDN) Standard for the web endpoint. Customer videos are downloaded from the web app by using the following example URL: http://www.contoso.com/ content.mp4?quality=1
All media content must expire from the cache after one hour. Customer videos with varying quality must be delivered to the closest regional point of presence (POP) node.
You need to configure Azure CDN caching rules.
Which options should you use? To answer, select the appropriate options in the answer area.
NOTE: Each correct selection is worth one point.
Hot Area:

Answer Area



- Drop Down 1 - Bypass cache
  Drop Down 2 - 1 hour
  Drop Down 3 - Cache every unique URL

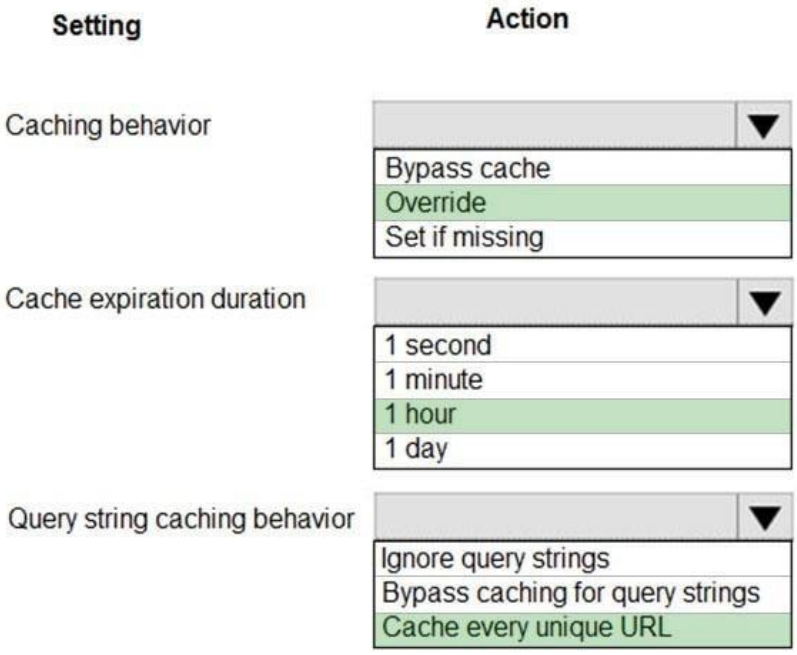
- Drop Down 1 - Set if missing
  Drop Down 2 - 1 hour
  Drop Down 3 - Cache every unique URL

- Drop Down 1 - Override
  Drop Down 2 - 1 second
  Drop Down 3 - Cache every unique URL

- **Drop Down 1 - Override**
  Drop Down 2 - 1 hour
  Drop Down 3 - Cache every unique URL

Correct

Answer Area



Box 1: Override –
Override: Ignore origin-provided cache duration; use the provided cache duration instead. This will not override cache-control: no-cache.
Set if missing: Honor origin-provided cache-directive headers, if they exist; otherwise, use the provided cache duration.
Incorrect:
Bypass cache: Do not cache and ignore origin-provided cache-directive headers.
Box 2: 1 hour –
All media content must expire from the cache after one hour.
Box 3: Cache every unique URL –
Cache every unique URL: In this mode, each request with a unique URL, including the query string, is treated as a unique asset with its own cache. For example, the response from the origin server for a request for example.ashx?q=test1 is cached at the POP node and returned for subsequent caches with the same query string. A request for example.ashx?q=test2 is cached as a separate asset with its own time-to-live setting.
Incorrect Answers:
Bypass caching for query strings: In this mode, requests with query strings are not cached at the CDN POP node. The POP node retrieves the asset directly from the origin server and passes it to the requestor with each request.
Ignore query strings: Default mode. In this mode, the CDN point-of-presence (POP) node passes the query strings from the requestor to the origin server on the first request and caches the asset. All subsequent requests for the asset that are served from the POP ignore the query strings until the cached asset expires.
Reference:
https://docs.microsoft.com/en-us/azure/cdn/cdn-query-string

You are building a website that is used to review restaurants. The website will use an Azure CDN to improve performance and add functionality to requests.
You build and deploy a mobile app for Apple iPhones. Whenever a user accesses the website from an iPhone, the user must be redirected to the app store.
You need to implement an Azure CDN rule that ensures that iPhone users are redirected to the app store.
How should you complete the Azure Resource Manager template?

```
"conditions": [ {
        "name": "IsDevice",
         "parameters": {
            "@odata.type": "#Microsoft.Azure. Cdn.Models._____A_____
            "operator": "Equal",
            "matchValues" : ["_____B_____"]
}},
{
        "name": "RequestHeader",
        "parameters": {
            "@odata.type": "#Microsoft.Azure.Cdn.Models._____C_____"
            "operator": "Contains",
             "selector": "_____D_____"
              "matchValues" : ["_____E_____"]
}}
]
```

What will come in place of A ?

- **DeliveryRuleIsDeviceConditionParameters**
- DeliveryRuleIsCookieConditionParameters
- DeliveryRuleIsPostArgsConditionParameters

Correct

The DeliveryRuleIsDeviceCondition defines the IsDevice condition for the delivery rule. parameters defines the parameters for the condition.
https://docs.microsoft.com/en-us/azure/active-directory/conditional-access/concept-conditional-access-conditions https://docs.microsoft.com/en-us/azure/active-directory/conditional-access/concept-conditional-access-grant

You are building a website that is used to review restaurants. The website will use an Azure CDN to improve performance and add functionality to requests.
You build and deploy a mobile app for Apple iPhones. Whenever a user accesses the website from an iPhone, the user must be redirected to the app store.
You need to implement an Azure CDN rule that ensures that iPhone users are redirected to the app store.
How should you complete the Azure Resource Manager template?

```
"conditions": [ {
        "name": "IsDevice",
         "parameters": {
            "@odata.type": "#Microsoft.Azure. Cdn.Models._____A_____
            "operator": "Equal",
            "matchValues" : ["_____B_____"]
```

}},
{
“name“: “RequestHeader“,
“parameters“: {
“@odata.type“: “#Microsoft.Azure.Cdn.Models._____C_____“
“operator“: “Contains“,
“selector“: “_____D_____“
“matchValues“ : [“_____E_____“]
}}
]
What will come in place of B ?

- **Mobile**
- **IOS**
- Iphone

Incorrect

https://docs.microsoft.com/en-us/python/api/azure-mgmt-cdn/azure.mgmt.cdn.models.isdevicematchconditionparametersmatchvaluesitem

You are building a website that is used to review restaurants. The website will use an Azure CDN to improve performance and add functionality to requests.
You build and deploy a mobile app for Apple iPhones. Whenever a user accesses the website from an iPhone, the user must be redirected to the app store.
You need to implement an Azure CDN rule that ensures that iPhone users are redirected to the app store.
How should you complete the Azure Resource Manager template?
“conditions“: [{
“name“: “IsDevice“,
“parameters“: {
“@odata.type“: “#Microsoft.Azure. Cdn.Models._____A_____
“operator“: “Equal“,
“matchValues“ : [“_____B_____“]
}},
{
“name“: “RequestHeader“,
“parameters“: {
“@odata.type“: “#Microsoft.Azure.Cdn.Models._____C_____“
“operator“: “Contains“,
“selector“: “_____D_____“
“matchValues“ : [“_____E_____“]
}}
]
What will come in place of C ?

- DeliveryRuleslsDeviceConditionParameters
- DeliveryRulesCookiesConditionsParameters
- **DeliveryRulesRequestHeaderConditionsParameters**

Correct

DeliveryRuleRequestHeaderConditionParameters
DeliveryRuleRequestHeaderCondition defines the RequestHeader condition for the delivery rule.
parameters defines the parameters for the condition.
Reference:
https://docs.microsoft.com/en-us/azure/active-directory/conditional-access/concept-conditional-access-conditions https://docs.microsoft.com/en-us/azure/active-directory/conditional-access/concept-conditional-access-grant

You are building a website that is used to review restaurants. The website will use an Azure CDN to improve performance and add functionality to requests.
You build and deploy a mobile app for Apple iPhones. Whenever a user accesses the website from an iPhone, the user must be redirected to the app store.
You need to implement an Azure CDN rule that ensures that iPhone users are redirected to the app store.
How should you complete the Azure Resource Manager template?

```
“conditions“: [ {
        “name“: “IsDevice“,
         “parameters“: {
            “@odata.type“: “#Microsoft.Azure. Cdn.Models._____A_____
            “operator“: “Equal“,
            “matchValues“ : [“_____B_____“]
}},
{
        “name“: “RequestHeader“,
        “parameters“: {
            “@odata.type“: “#Microsoft.Azure.Cdn.Models._____C_____“
            “operator“: “Contains“,
             “selector“: “_____D_____“
              “matchValues“ : [“_____E_____“]
}}
]
```

What will come in place of D ?

- From
- PRAGMA
- **HTTP_USER_AGENT**

Correct

Reference:
https://docs.microsoft.com/en-us/azure/active-directory/conditional-access/concept-conditional-access-conditions https://docs.microsoft.com/en-us/azure/active-directory/conditional-access/concept-conditional-access-grant

You are building a website that is used to review restaurants. The website will use an Azure CDN to improve performance and add functionality to requests.
You build and deploy a mobile app for Apple iPhones. Whenever a user accesses the website from an iPhone, the user must be redirected to the app store.
You need to implement an Azure CDN rule that ensures that iPhone users are redirected to the app store.

How should you complete the Azure Resource Manager template?

```
“conditions“: [ {
        “name“: “IsDevice“,
         “parameters“: {
            “@odata.type“: “#Microsoft.Azure. Cdn.Models._____A_____
            “operator“: “Equal“,
            “matchValues“ : [“_____B_____“]
}},
{
        “name“: “RequestHeader“,
        “parameters“: {
            “@odata.type“: “#Microsoft.Azure.Cdn.Models._____C_____“
            “operator“: “Contains“,
             “selector“: “_____D_____“
              “matchValues“ : [“_____E_____“]
}}
]
```

What will come in place of E ?

- iOS
- Mobile
- **iPhone**
- Desktop

Correct

https://docs.microsoft.com/en-us/python/api/azure-mgmt-cdn/azure.mgmt.cdn.models.isdevicematchconditionparametersmatchvaluesitem

You are developing an Azure App Service hosted ASP.NET Core web app to deliver video on-demand streaming media. You enable an Azure Content Delivery Network (CDN) Standard for the web endpoint. Customer videos are downloaded from the web app by using the following example URL.: http://www.preparationlabs.com/content.mp4?quality=1
All media content must expire from the cache after one hour. Customer videos with varying quality must be delivered to the closest regional point of presence (POP) node.
You need to configure Azure CDN caching rules.
Which option should you use for Caching behavior?

- Bypass Cache
- **Override**
- Set if missing

Correct

For global and custom caching rules, you can specify the following Caching behavior settings:
Bypass cache: Do not cache and ignore origin-provided cache-directive headers.
Override: Ignore origin-provided cache duration; use the provided cache duration instead. This will not override cache-control: no-cache.
Set if missing: Honor origin-provided cache-directive headers, if they exist; otherwise, use the provided cache duration.
In this scenario, the content must expire after one hour. So we need to ignore origin provided cache

duration and use cache duration that is provided by us.
https://docs.microsoft.com/en-us/azure/cdn/cdn-caching-rules

You are developing an Azure App Service hosted ASP.NET Core web app to deliver video on-demand streaming media. You enable an Azure Content Delivery Network (CDN) Standard for the web endpoint. Customer videos are downloaded from the web app by using the following example URL.: http://www.preparationlabs.com/content.mp4?quality=1
All media content must expire from the cache after one hour. Customer videos with varying quality must be delivered to the closest regional point of presence (POP) node.
You need to configure Azure CDN caching rules.
Which option should you configure for cache expiration duration?

- 1 Second
- 1 Minute
- **1 Hour**
- 1 Month

Correct

All media content must expire from the cache after one hour.
https://docs.microsoft.com/en-us/azure/cdn/cdn-query-string

You are developing an Azure App Service hosted ASP.NET Core web app to deliver video on-demand streaming media. You enable an Azure Content Delivery Network (CDN) Standard for the web endpoint. Customer videos are downloaded from the web app by using the following example URL.: http://www.preparationlabs.com/content.mp4?quality=1
All media content must expire from the cache after one hour. Customer videos with varying quality must be delivered to the closest regional point of presence (POP) node.
You need to configure Azure CDN caching rules.
Which option should you configure for query string caching behavior?

- Ignore Query Strings
- Bypass caching for query strings
- **Cache every unique URL**

Correct

Quality is a query string parameter and question asks for Customer videos with varying quality must be delivered to the closest regional point of presence (POP) node. So, we need to cache every unique URL
Cache every unique URL: In this mode, each request with a unique URL, including the query string, is treated as a unique asset with its own cache.
https://docs.microsoft.com/en-us/azure/cdn/cdn-query-string

You are developing an application using Azure CDN from Microsoft. You are troubleshooting an issue to find whether the content is served from the origin or CDN.
Which HTTP header value will indicate if the content is served from the origin?

- X-Cache: TCP_HIT
- X-Cache: TCP_REMOTE_HIT
- **X-Cache: TCP_MISS**

Incorrect

X-Cache: TCP_MISS – This header is returned when there is a cache miss, and the content is served from the Origin.
https://docs.microsoft.com/en-us/azure/cdn/cdn-msft-http-debug-headers

You have created below caching rules on an Azure CDN endpoint named preparationlabs.azureedge.net
 Global caching rule:
o Caching behavior: Override
o Cache expiration duration: 1 day
 Custom caching rule #1:
o Match condition: Path
o Match value: /home/*
o Caching behavior: Override
o Cache expiration duration: 2 days
 Custom caching rule #2:
o Match condition: Extension
o Match value: .html
o Caching behavior: Set if missing
o Cache expiration duration: 3 days
A user requested for preparationlabs.azureedge.net/home/index.html. For how many days the index.html file will be cached?

- **1**
- 2
- **3**

Incorrect

Global caching rule:
Caching behavior: Override
Cache expiration duration: 1 day
Custom caching rule #1:
Match condition: Path
Match value: /home/*
Caching behavior: Override
Cache expiration duration: 2 days
Custom caching rule #2:
Match condition: Extension
Match value: .html
Caching behavior: Set if missing
Cache expiration duration: 3 days
When these rules are set, a request for .azureedge.net/home/index.html triggers custom caching rule #2, which is set to: Set if missing and 3 days. Therefore, if the index.html file has Cache-Control or Expires HTTP headers, they are honored; otherwise, if these headers are not set, the file is cached for 3 days.
https://docs.microsoft.com/en-us/azure/cdn/cdn-caching-rules

Your company has several websites that use a company logo image. You use Azure Content Delivery Network (CDN) to store the static image.
You need to determine the correct process of how the CDN and the Point of Presence (POP) server will distribute the image and list the items in the correct order.
In which order do the actions occur?

- **If no edge servers in the POP have the image in cache, the POP requests the file from the origin server The origin server returns the logo image to an edge server in the POP. An edge server in the POP caches the logo image and returns the image to the client. A user requests the image from the CDN URL. The DNS routes the request to the best performing POP location. Subsequent requests for the file may be directed to the same POP using the CDN logo image URL. The POP edge server return the file from cache if the TTL has not expired A user requests the image from the CDN URL. The DNS routes the request to the best performing POP location.**
- **If no edge servers in the POP have the image in cache, the POP requests the file from the origin server The origin server returns the logo image to an edge server in the POP. An edge server in the POP caches the logo image and returns the image to the client. Subsequent requests for the file may be directed to the same POP using the CDN logo image URL. The POP edge server return the file from cache if the TTL has not expired**
- The origin server returns the logo image to an edge server in the POP. An edge server in the POP caches the logo image and returns the image to the client. Subsequent requests for the file may be directed to the same POP using the CDN logo image URL. The POP edge server return the file from cache if the TTL has not expired. If no edge servers in the POP have the image in cache, the POP requests the file from the origin server. A user requests the image from the CDN URL. The DNS routes the request to the best performing POP location.

Incorrect

https://docs.microsoft.com/en-us/azure/cdn/cdn-overview#how-it-works

You are developing an application using Azure CDN from Microsoft. You are troubleshooting an issue to find whether the content is served from the origin or CDN. Which HTTP header value will indicate if the content is served from the CDN regional cache?

- **X-Cache: TCP_HIT**
- **X-Cache: TCP_REMOTE_HIT**
- X-Cache: TCP_MISS

Incorrect

X-Cache: TCP_REMOTE_HIT – This header is returned when the content is served from the CDN regional cache (Origin shield layer)
https://docs.microsoft.com/en-us/azure/cdn/cdn-msft-http-debug-headers

You have created below caching rules on an Azure CDN endpoint named preparationlabs.azureedge.net
 Global caching rule:
o Caching behavior: Override
o Cache expiration duration: 1 day
 Custom caching rule #1:
o Match condition: Path
o Match value: /home/*

o Caching behavior: Override
o Cache expiration duration: 2 days
 Custom caching rule #2:
o Match condition: Extension
o Match value: .html
o Caching behavior: Set if missing
o Cache expiration duration: 3 days
Which caching rule takes precedence?

- **Global caching rule**
- Custom caching rule#1
- **Custo caching rule#2**

Incorrect

Global and custom caching rules are processed in the following order:
Global caching rules take precedence over the default CDN caching behavior (HTTP cache-directive header settings).
Custom caching rules take precedence over global caching rules, where they apply. Custom caching rules are processed in order from top to bottom. That is, if a request matches both conditions, rules at the bottom of the list take precedence over rules at the top of the list. Therefore, you should place more specific rules lower in the list.
https://docs.microsoft.com/en-us/azure/cdn/cdn-caching-rules

Read the Case Study paragraph from Question 1 of Practice Test 3 and answer the below question.
You need to configure Azure CDN for the Shipping web site.
Which configuration options should you use? To answer, select the appropriate options in the answer area. NOTE: Each correct selection is worth one point.

- **1) Tire = Standard**
  2) Profile = Akamai
  3) Optimization = dynamic site acceleration

- 1) Tire = Premium
  2) Profile = Akamai
  3) Optimization = dynamic site acceleration

- **1) Tire = Standard**
  2) Profile = Microsoft
  3) Optimization = dynamic site acceleration

- 1) Tire = Standard
  2) Profile = Akamai
  3) Optimization = general web delivery

Incorrect

Scenario: Shipping website
Use Azure Content Delivery Network (CDN) and ensure maximum performance for dynamic content while minimizing latency and costs.
Tier: Standard

Profile: Akamai
Optimization: Dynamic site acceleration
Dynamic site acceleration (DSA) is available for Azure CDN Standard from Akamai, Azure CDN Standard from Verizon, and Azure CDN Premium from Verizon profiles.
DSA includes various techniques that benefit the latency and performance of dynamic content. Techniques include route and network optimization, TCP optimization, and more.
You can use this optimization to accelerate a web app that includes numerous responses that aren‘t cacheable. Examples are search results, checkout transactions, or real-time data. You can continue to use core Azure CDN caching capabilities for static data.

You are configuring a web app that delivers streaming video to users.
You need to ensure that the users streaming experience is constant.
You also want to configure the application to store data in a geographic location that is nearest to the user.
To achieve the requirement, you include the use of Azure Redis Cache in your design.
Did you achieve the requirement?

- Yes
- **No**

Correct

Azure Redis Cache is used for server side caching. Instead, you can use Content Delivery Network (CDN). A content delivery network (CDN) is a distributed network of servers that can efficiently deliver web content to users. CDNs store cached content on edge servers that are close to end users to minimize latency.
https://docs.microsoft.com/en-us/azure/architecture/best-practices/cdn

You are configuring a web app that delivers streaming video to users.
You need to ensure that the users streaming experience is constant.
You also want to configure the application to store data in a geographic location that is nearest to the user.
To achieve the requirement, you include the use of an Azure Content Delivery Network (CDN) in your design.
Did you achieve the requirement?

- **Yes**
- No

Correct

You can use Content Delivery Network (CDN). A content delivery network (CDN) is a distributed network of servers that can efficiently deliver web content to users. CDNs store cached content on edge servers that are close to end users to minimize latency.
https://docs.microsoft.com/en-us/azure/architecture/best-practices/cdn