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# Amazon CloudFront

## API Reference

### API Version 2019-03-26



## Amazon CloudFront: API Reference

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# Welcome

This is the *Amazon CloudFront API Reference*. This guide is for developers who need detailed information about CloudFront API actions, data types, and errors. For detailed information about CloudFront features, see the *Amazon CloudFront Developer Guide*.

This document was last published on September 18, 2019.

# Actions

The following actions are supported:

- [CreateCloudFrontOriginAccessIdentity \(p. 4\)](#)
- [CreateDistribution \(p. 7\)](#)
- [CreateDistributionWithTags \(p. 25\)](#)
- [CreateFieldLevelEncryptionConfig \(p. 40\)](#)
- [CreateFieldLevelEncryptionProfile \(p. 44\)](#)
- [CreateInvalidation \(p. 48\)](#)
- [CreatePublicKey \(p. 51\)](#)
- [CreateStreamingDistribution \(p. 54\)](#)
- [CreateStreamingDistributionWithTags \(p. 60\)](#)
- [DeleteCloudFrontOriginAccessIdentity \(p. 65\)](#)
- [DeleteDistribution \(p. 67\)](#)
- [DeleteFieldLevelEncryptionConfig \(p. 69\)](#)
- [DeleteFieldLevelEncryptionProfile \(p. 71\)](#)
- [DeletePublicKey \(p. 73\)](#)
- [DeleteStreamingDistribution \(p. 75\)](#)
- [GetCloudFrontOriginAccessIdentity \(p. 78\)](#)
- [GetCloudFrontOriginAccessIdentityConfig \(p. 80\)](#)
- [GetDistribution \(p. 82\)](#)
- [GetDistributionConfig \(p. 89\)](#)
- [GetFieldLevelEncryption \(p. 98\)](#)
- [GetFieldLevelEncryptionConfig \(p. 101\)](#)
- [GetFieldLevelEncryptionProfile \(p. 104\)](#)
- [GetFieldLevelEncryptionProfileConfig \(p. 106\)](#)
- [GetInvalidation \(p. 108\)](#)
- [GetPublicKey \(p. 111\)](#)
- [GetPublicKeyConfig \(p. 113\)](#)
- [GetStreamingDistribution \(p. 115\)](#)
- [GetStreamingDistributionConfig \(p. 118\)](#)
- [ListCloudFrontOriginAccessIdentities \(p. 121\)](#)
- [ListDistributions \(p. 124\)](#)
- [ListDistributionsByWebACLId \(p. 130\)](#)
- [ListFieldLevelEncryptionConfigs \(p. 136\)](#)
- [ListFieldLevelEncryptionProfiles \(p. 139\)](#)
- [ListInvalidations \(p. 142\)](#)
- [ListPublicKeys \(p. 145\)](#)
- [ListStreamingDistributions \(p. 147\)](#)
- [ListTagsForResource \(p. 150\)](#)
- [TagResource \(p. 152\)](#)
- [UntagResource \(p. 154\)](#)
- [UpdateCloudFrontOriginAccessIdentity \(p. 156\)](#)

- [UpdateDistribution \(p. 159\)](#)
- [UpdateFieldLevelEncryptionConfig \(p. 178\)](#)
- [UpdateFieldLevelEncryptionProfile \(p. 182\)](#)
- [UpdatePublicKey \(p. 186\)](#)
- [UpdateStreamingDistribution \(p. 189\)](#)

# CreateCloudFrontOriginAccessIdentity

Creates a new origin access identity. If you're using Amazon S3 for your origin, you can use an origin access identity to require users to access your content using a CloudFront URL instead of the Amazon S3 URL. For more information about how to use origin access identities, see [Serving Private Content through CloudFront](#) in the *Amazon CloudFront Developer Guide*.

## Request Syntax

```
POST /2019-03-26/origin-access-identity/cloudfront HTTP/1.1
<?xml version="1.0" encoding="UTF-8"?>
<CloudFrontOriginAccessIdentityConfig xmlns="http://cloudfront.amazonaws.com/doc/2019-03-26/">
  <CallerReference>string</CallerReference>
  <Comment>string</Comment>
</CloudFrontOriginAccessIdentityConfig>
```

## URI Request Parameters

The request does not use any URI parameters.

## Request Body

The request accepts the following data in XML format.

### [CloudFrontOriginAccessIdentityConfig \(p. 4\)](#)

Root level tag for the CloudFrontOriginAccessIdentityConfig parameters.

Required: Yes

#### [CallerReference \(p. 4\)](#)

A unique value (for example, a date-time stamp) that ensures that the request can't be replayed.

If the value of CallerReference is new (regardless of the content of the CloudFrontOriginAccessIdentityConfig object), a new origin access identity is created.

If the CallerReference is a value already sent in a previous identity request, and the content of the CloudFrontOriginAccessIdentityConfig is identical to the original request (ignoring white space), the response includes the same information returned to the original request.

If the CallerReference is a value you already sent in a previous request to create an identity, but the content of the CloudFrontOriginAccessIdentityConfig is different from the original request, CloudFront returns a CloudFrontOriginAccessIdentityAlreadyExists error.

Type: String

Required: Yes

#### [Comment \(p. 4\)](#)

Any comments you want to include about the origin access identity.

Type: String

Required: Yes

## Response Syntax

```
HTTP/1.1 201
<?xml version="1.0" encoding="UTF-8"?>
<CloudFrontOriginAccessIdentity>
  <CloudFrontOriginAccessIdentityConfig>
    <CallerReference>string</CallerReference>
    <Comment>string</Comment>
  </CloudFrontOriginAccessIdentityConfig>
  <Id>string</Id>
  <S3CanonicalUserId>string</S3CanonicalUserId>
</CloudFrontOriginAccessIdentity>
```

## Response Elements

If the action is successful, the service sends back an HTTP 201 response.

The following data is returned in XML format by the service.

### [CloudFrontOriginAccessIdentity \(p. 5\)](#)

Root level tag for the CloudFrontOriginAccessIdentity parameters.

Required: Yes

### [CloudFrontOriginAccessIdentityConfig \(p. 5\)](#)

The current configuration information for the identity.

Type: [CloudFrontOriginAccessIdentityConfig \(p. 210\)](#) object

### [Id \(p. 5\)](#)

The ID for the origin access identity, for example, E74FTE3AJFJ256A.

Type: String

### [S3CanonicalUserId \(p. 5\)](#)

The Amazon S3 canonical user ID for the origin access identity, used when giving the origin access identity read permission to an object in Amazon S3.

Type: String

## Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 312\)](#).

### [CloudFrontOriginAccessIdentityAlreadyExists](#)

If the `CallerReference` is a value you already sent in a previous request to create an identity but the content of the `CloudFrontOriginAccessIdentityConfig` is different from the original request, CloudFront returns a `CloudFrontOriginAccessIdentityAlreadyExists` error.

HTTP Status Code: 409

### [InconsistentQuantities](#)

The value of `Quantity` and the size of `Items` don't match.

HTTP Status Code: 400

### **InvalidArgumentException**

The argument is invalid.

HTTP Status Code: 400

### **MissingBody**

This operation requires a body. Ensure that the body is present and the Content-Type header is set.

HTTP Status Code: 400

### **TooManyCloudFrontOriginAccessIdentities**

Processing your request would cause you to exceed the maximum number of origin access identities allowed.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java](#)
- [AWS SDK for JavaScript](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V2](#)

# CreateDistribution

Creates a new web distribution. You create a CloudFront distribution to tell CloudFront where you want content to be delivered from, and the details about how to track and manage content delivery. Send a `POST` request to the `/CloudFront API version/distribution/distribution ID` resource.

## Important

When you update a distribution, there are more required fields than when you create a distribution. When you update your distribution by using [UpdateDistribution](#), follow the steps included in the documentation to get the current configuration and then make your updates. This helps to make sure that you include all of the required fields. To view a summary, see [Required Fields for Create Distribution and Update Distribution](#) in the *Amazon CloudFront Developer Guide*.

## Request Syntax

```
POST /2019-03-26/distribution HTTP/1.1
<?xml version="1.0" encoding="UTF-8"?>
<DistributionConfig xmlns="http://cloudfront.amazonaws.com/doc/2019-03-26/">
  <Aliases>
    <Items>
      <CNAME>string</CNAME>
    </Items>
    <Quantity>integer</Quantity>
  </Aliases>
  <CacheBehaviors>
    <Items>
      <CacheBehavior>
        <AllowedMethods>
          <CachedMethods>
            <Items>
              <Method>string</Method>
            </Items>
            <Quantity>integer</Quantity>
          </CachedMethods>
          <Items>
            <Method>string</Method>
          </Items>
          <Quantity>integer</Quantity>
        </AllowedMethods>
        <Compress>boolean</Compress>
        <DefaultTTL>long</DefaultTTL>
        <FieldLevelEncryptionId>string</FieldLevelEncryptionId>
        <ForwardedValues>
          <Cookies>
            <Forward>string</Forward>
            <WhitelistedNames>
              <Items>
                <Name>string</Name>
              </Items>
              <Quantity>integer</Quantity>
            </WhitelistedNames>
          </Cookies>
          <Headers>
            <Items>
              <Name>string</Name>
            </Items>
            <Quantity>integer</Quantity>
          </Headers>
          <QueryString>boolean</QueryString>
          <QueryStringCacheKeys>
```

```
<Items>
    <Name>string</Name>
</Items>
<Quantity>integer</Quantity>
</QueryStringCacheKeys>
</ForwardedValues>
<LambdaFunctionAssociations>
    <Items>
        <LambdaFunctionAssociation>
            <EventType>string</EventType>
            <IncludeBody>boolean</IncludeBody>
            <LambdaFunctionARN>string</LambdaFunctionARN>
        </LambdaFunctionAssociation>
    </Items>
    <Quantity>integer</Quantity>
</LambdaFunctionAssociations>
<MaxTTL>long</MaxTTL>
<MinTTL>long</MinTTL>
<PathPattern>string</PathPattern>
<SmoothStreaming>boolean</SmoothStreaming>
<TargetOriginId>string</TargetOriginId>
<TrustedSigners>
    <Enabled>boolean</Enabled>
    <Items>
        <AwsAccountNumber>string</AwsAccountNumber>
    </Items>
    <Quantity>integer</Quantity>
</TrustedSigners>
    <ViewerProtocolPolicy>string</ViewerProtocolPolicy>
</CacheBehavior>
</Items>
<Quantity>integer</Quantity>
</CacheBehaviors>
<CallerReference>string</CallerReference>
<Comment>string</Comment>
<CustomErrorResponses>
    <Items>
        <CustomErrorResponse>
            <ErrorCachingMinTTL>long</ErrorCachingMinTTL>
            <ErrorCode>integer</ErrorCode>
            <ResponseCode>string</ResponseCode>
            <ResponsePagePath>string</ResponsePagePath>
        </CustomErrorResponse>
    </Items>
    <Quantity>integer</Quantity>
</CustomErrorResponses>
<DefaultCacheBehavior>
    <AllowedMethods>
        <CachedMethods>
            <Items>
                <Method>string</Method>
            </Items>
            <Quantity>integer</Quantity>
        </CachedMethods>
        <Items>
            <Method>string</Method>
        </Items>
            <Quantity>integer</Quantity>
        </AllowedMethods>
        <Compress>boolean</Compress>
        <DefaultTTL>long</DefaultTTL>
        <FieldLevelEncryptionId>string</FieldLevelEncryptionId>
        <ForwardedValues>
            <Cookies>
                <Forward>string</Forward>
            <WhitelistedNames>
```

```
<Items>
    <Name>string</Name>
</Items>
<Quantity>integer</Quantity>
</WhitelistedNames>
</Cookies>
<Headers>
    <Items>
        <Name>string</Name>
    </Items>
    <Quantity>integer</Quantity>
</Headers>
<QueryString>boolean</QueryString>
<QueryStringCacheKeys>
    <Items>
        <Name>string</Name>
    </Items>
    <Quantity>integer</Quantity>
</QueryStringCacheKeys>
</ForwardedValues>
<LambdaFunctionAssociations>
    <Items>
        <LambdaFunctionAssociation>
            <EventType>string</EventType>
            <IncludeBody>boolean</IncludeBody>
            <LambdaFunctionARN>string</LambdaFunctionARN>
        </LambdaFunctionAssociation>
    </Items>
    <Quantity>integer</Quantity>
</LambdaFunctionAssociations>
<MaxTTL>long</MaxTTL>
<MinTTL>long</MinTTL>
<SmoothStreaming>boolean</SmoothStreaming>
<TargetOriginId>string</TargetOriginId>
<TrustedSigners>
    <Enabled>boolean</Enabled>
    <Items>
        <AwsAccountNumber>string</AwsAccountNumber>
    </Items>
    <Quantity>integer</Quantity>
</TrustedSigners>
<ViewerProtocolPolicy>string</ViewerProtocolPolicy>
</DefaultCacheBehavior>
<DefaultRootObject>string</DefaultRootObject>
<Enabled>boolean</Enabled>
<HttpVersion>string</HttpVersion>
<IsIPV6Enabled>boolean</IsIPV6Enabled>
<Logging>
    <Bucket>string</Bucket>
    <Enabled>boolean</Enabled>
    <IncludeCookies>boolean</IncludeCookies>
    <Prefix>string</Prefix>
</Logging>
<OriginGroups>
    <Items>
        <OriginGroup>
            <FailoverCriteria>
                <StatusCodes>
                    <Items>
                        <StatusCode>integer</StatusCode>
                    </Items>
                    <Quantity>integer</Quantity>
                </StatusCodes>
            </FailoverCriteria>
            <Id>string</Id>
            <Members>
```

```
<Items>
    <OriginGroupMember>
        <OriginId>string</OriginId>
    </OriginGroupMember>
</Items>
<Quantity>integer</Quantity>
</OriginGroups>
<Origins>
    <Items>
        <Origin>
            <CustomHeaders>
                <Items>
                    <OriginCustomHeader>
                        <HeaderName>string</HeaderName>
                        <HeaderValue>string</HeaderValue>
                    </OriginCustomHeader>
                </Items>
                <Quantity>integer</Quantity>
            </CustomHeaders>
            <CustomOriginConfig>
                <HTTPPort>integer</HTTPPort>
                <HTTPSPort>integer</HTTPSPort>
                <OriginKeepaliveTimeout>integer</OriginKeepaliveTimeout>
                <OriginProtocolPolicy>string</OriginProtocolPolicy>
                <OriginReadTimeout>integer</OriginReadTimeout>
                <OriginSslProtocols>
                    <Items>
                        <SslProtocol>string</SslProtocol>
                    </Items>
                    <Quantity>integer</Quantity>
                </OriginSslProtocols>
            </CustomOriginConfig>
            <DomainName>string</DomainName>
            <Id>string</Id>
            <OriginPath>string</OriginPath>
            <S3OriginConfig>
                <OriginAccessIdentity>string</OriginAccessIdentity>
            </S3OriginConfig>
        </Origin>
    </Items>
    <Quantity>integer</Quantity>
</Origins>
<PriceClass>string</PriceClass>
<Restrictions>
    <GeoRestriction>
        <Items>
            <Location>string</Location>
        </Items>
        <Quantity>integer</Quantity>
        <RestrictionType>string</RestrictionType>
    </GeoRestriction>
</Restrictions>
<ViewerCertificate>
    <ACMCertificateArn>string</ACMCertificateArn>
    <Certificate>string</Certificate>
    <CertificateSource>string</CertificateSource>
    <CloudFrontDefaultCertificate>boolean</CloudFrontDefaultCertificate>
    <IAMCertificateId>string</IAMCertificateId>
    <MinimumProtocolVersion>string</MinimumProtocolVersion>
    <SSLSupportMethod>string</SSLSupportMethod>
</ViewerCertificate>
<WebACLId>string</WebACLId>
```

```
</DistributionConfig>
```

## URI Request Parameters

The request does not use any URI parameters.

## Request Body

The request accepts the following data in XML format.

### [DistributionConfig \(p. 7\)](#)

Root level tag for the DistributionConfig parameters.

Required: Yes

### [Aliases \(p. 7\)](#)

A complex type that contains information about CNAMEs (alternate domain names), if any, for this distribution.

Type: [Aliases \(p. 199\)](#) object

Required: No

### [CacheBehaviors \(p. 7\)](#)

A complex type that contains zero or more CacheBehavior elements.

Type: [CacheBehaviors \(p. 207\)](#) object

Required: No

### [CallerReference \(p. 7\)](#)

A unique value (for example, a date-time stamp) that ensures that the request can't be replayed.

If the value of CallerReference is new (regardless of the content of the DistributionConfig object), CloudFront creates a new distribution.

If CallerReference is a value that you already sent in a previous request to create a distribution, CloudFront returns a `DistributionAlreadyExists` error.

Type: String

Required: Yes

### [Comment \(p. 7\)](#)

Any comments you want to include about the distribution.

If you don't want to specify a comment, include an empty Comment element.

To delete an existing comment, update the distribution configuration and include an empty Comment element.

To add or change a comment, update the distribution configuration and specify the new comment.

Type: String

Required: Yes

### [CustomErrorResponses \(p. 7\)](#)

A complex type that controls the following:

- Whether CloudFront replaces HTTP status codes in the 4xx and 5xx range with custom error messages before returning the response to the viewer.
- How long CloudFront caches HTTP status codes in the 4xx and 5xx range.

For more information about custom error pages, see [Customizing Error Responses](#) in the *Amazon CloudFront Developer Guide*.

Type: [CustomErrorResponses \(p. 221\)](#) object

Required: No

### [DefaultCacheBehavior \(p. 7\)](#)

A complex type that describes the default cache behavior if you don't specify a `CacheBehavior` element or if files don't match any of the values of `PathPattern` in `CacheBehavior` elements. You must create exactly one default cache behavior.

Type: [DefaultCacheBehavior \(p. 225\)](#) object

Required: Yes

### [DefaultRootObject \(p. 7\)](#)

The object that you want CloudFront to request from your origin (for example, `index.html`) when a viewer requests the root URL for your distribution (`http://www.example.com`) instead of an object in your distribution (`http://www.example.com/product-description.html`). Specifying a default root object avoids exposing the contents of your distribution.

Specify only the object name, for example, `index.html`. Don't add a / before the object name.

If you don't want to specify a default root object when you create a distribution, include an empty `DefaultRootObject` element.

To delete the default root object from an existing distribution, update the distribution configuration and include an empty `DefaultRootObject` element.

To replace the default root object, update the distribution configuration and specify the new object.

For more information about the default root object, see [Creating a Default Root Object](#) in the *Amazon CloudFront Developer Guide*.

Type: String

Required: No

### [Enabled \(p. 7\)](#)

From this field, you can enable or disable the selected distribution.

Type: Boolean

Required: Yes

### [HttpVersion \(p. 7\)](#)

(Optional) Specify the maximum HTTP version that you want viewers to use to communicate with CloudFront. The default value for new web distributions is `http2`. Viewers that don't support `HTTP/2` automatically use an earlier HTTP version.

For viewers and CloudFront to use `HTTP/2`, viewers must support TLS 1.2 or later, and must support Server Name Identification (SNI).

In general, configuring CloudFront to communicate with viewers using HTTP/2 reduces latency. You can improve performance by optimizing for HTTP/2. For more information, do an Internet search for "http/2 optimization."

Type: String

Valid Values: `http1.1` | `http2`

Required: No

### **IsIPV6Enabled (p. 7)**

If you want CloudFront to respond to IPv6 DNS requests with an IPv6 address for your distribution, specify `true`. If you specify `false`, CloudFront responds to IPv6 DNS requests with the DNS response code `NOERROR` and with no IP addresses. This allows viewers to submit a second request, for an IPv4 address for your distribution.

In general, you should enable IPv6 if you have users on IPv6 networks who want to access your content. However, if you're using signed URLs or signed cookies to restrict access to your content, and if you're using a custom policy that includes the `IpAddress` parameter to restrict the IP addresses that can access your content, don't enable IPv6. If you want to restrict access to some content by IP address and not restrict access to other content (or restrict access but not by IP address), you can create two distributions. For more information, see [Creating a Signed URL Using a Custom Policy](#) in the *Amazon CloudFront Developer Guide*.

If you're using an Amazon Route 53 alias resource record set to route traffic to your CloudFront distribution, you need to create a second alias resource record set when both of the following are true:

- You enable IPv6 for the distribution
- You're using alternate domain names in the URLs for your objects

For more information, see [Routing Traffic to an Amazon CloudFront Web Distribution by Using Your Domain Name](#) in the *Amazon Route 53 Developer Guide*.

If you created a CNAME resource record set, either with Amazon Route 53 or with another DNS service, you don't need to make any changes. A CNAME record will route traffic to your distribution regardless of the IP address format of the viewer request.

Type: Boolean

Required: No

### **Logging (p. 7)**

A complex type that controls whether access logs are written for the distribution.

For more information about logging, see [Access Logs](#) in the *Amazon CloudFront Developer Guide*.

Type: [LoggingConfig \(p. 267\)](#) object

Required: No

### **OriginGroups (p. 7)**

A complex type that contains information about origin groups for this distribution.

Type: [OriginGroups \(p. 276\)](#) object

Required: No

### **Origins (p. 7)**

A complex type that contains information about origins for this distribution.

Type: [Origins \(p. 277\)](#) object

Required: Yes

#### [PriceClass \(p. 7\)](#)

The price class that corresponds with the maximum price that you want to pay for CloudFront service. If you specify `PriceClass_All`, CloudFront responds to requests for your objects from all CloudFront edge locations.

If you specify a price class other than `PriceClass_All`, CloudFront serves your objects from the CloudFront edge location that has the lowest latency among the edge locations in your price class. Viewers who are in or near regions that are excluded from your specified price class may encounter slower performance.

For more information about price classes, see [Choosing the Price Class for a CloudFront Distribution](#) in the *Amazon CloudFront Developer Guide*. For information about CloudFront pricing, including how price classes (such as Price Class 100) map to CloudFront regions, see [Amazon CloudFront Pricing](#). For price class information, scroll down to see the table at the bottom of the page.

Type: String

Valid Values: `PriceClass_100` | `PriceClass_200` | `PriceClass_All`

Required: No

#### [Restrictions \(p. 7\)](#)

A complex type that identifies ways in which you want to restrict distribution of your content.

Type: [Restrictions \(p. 288\)](#) object

Required: No

#### [ViewerCertificate \(p. 7\)](#)

A complex type that specifies whether you want viewers to use HTTP or HTTPS to request your objects, whether you're using an alternate domain name with HTTPS, and if so, if you're using AWS Certificate Manager (ACM) or a third-party certificate authority.

Type: [ViewerCertificate \(p. 307\)](#) object

Required: No

#### [WebACLId \(p. 7\)](#)

A unique identifier that specifies the AWS WAF web ACL, if any, to associate with this distribution.

AWS WAF is a web application firewall that lets you monitor the HTTP and HTTPS requests that are forwarded to CloudFront, and lets you control access to your content. Based on conditions that you specify, such as the IP addresses that requests originate from or the values of query strings, CloudFront responds to requests either with the requested content or with an HTTP 403 status code (Forbidden). You can also configure CloudFront to return a custom error page when a request is blocked. For more information about AWS WAF, see the [AWS WAF Developer Guide](#).

Type: String

Required: No

## Response Syntax

```
HTTP/1.1 201
```

```

<?xml version="1.0" encoding="UTF-8"?>
<Distribution>
  <ActiveTrustedSigners>
    <Enabled>boolean</Enabled>
    <Items>
      <Signer>
        <AwsAccountNumber>string</AwsAccountNumber>
        <KeyPairIds>
          <Items>
            <KeyValuePairId>string</KeyValuePairId>
          </Items>
          <Quantity>integer</Quantity>
        </KeyPairIds>
      </Signer>
    </Items>
    <Quantity>integer</Quantity>
  </ActiveTrustedSigners>
  <AliasICPRecordals>
    <AliasICPRecordal>
      <CNAME>string</CNAME>
      <ICPRecordalStatus>string</ICPRecordalStatus>
    </AliasICPRecordal>
  </AliasICPRecordals>
  <ARN>string</ARN>
  <DistributionConfig>
    <Aliases>
      <Items>
        <CNAME>string</CNAME>
      </Items>
        <Quantity>integer</Quantity>
    </Aliases>
    <CacheBehaviors>
      <Items>
        <CacheBehavior>
          <AllowedMethods>
            <CachedMethods>
              <Items>
                <Method>string</Method>
              </Items>
                <Quantity>integer</Quantity>
            </CachedMethods>
            <Items>
              <Method>string</Method>
            </Items>
              <Quantity>integer</Quantity>
            </AllowedMethods>
            <Compress>boolean</Compress>
            <DefaultTTL>long</DefaultTTL>
            <FieldLevelEncryptionId>string</FieldLevelEncryptionId>
            <ForwardedValues>
              <Cookies>
                <Forward>string</Forward>
                <WhitelistedNames>
                  <Items>
                    <Name>string</Name>
                  </Items>
                    <Quantity>integer</Quantity>
                  </WhitelistedNames>
                </Cookies>
                <Headers>
                  <Items>
                    <Name>string</Name>
                  </Items>
                    <Quantity>integer</Quantity>
                </Headers>
                <QueryString>boolean</QueryString>
              </ForwardedValues>
            </FieldLevelEncryptionId>
          </CacheBehavior>
        </Items>
      </CacheBehaviors>
    </DistributionConfig>
  </Distribution>

```

```
<QueryStringCacheKeys>
  <Items>
    <Name>string</Name>
  </Items>
  <Quantity>integer</Quantity>
</QueryStringCacheKeys>
</ForwardedValues>
<LambdaFunctionAssociations>
  <Items>
    <LambdaFunctionAssociation>
      <EventType>string</EventType>
      <IncludeBody>boolean</IncludeBody>
      <LambdaFunctionARN>string</LambdaFunctionARN>
    </LambdaFunctionAssociation>
  </Items>
  <Quantity>integer</Quantity>
</LambdaFunctionAssociations>
<MaxTTL>long</MaxTTL>
<MinTTL>long</MinTTL>
<PathPattern>string</PathPattern>
<SmoothStreaming>boolean</SmoothStreaming>
<TargetOriginId>string</TargetOriginId>
<TrustedSigners>
  <Enabled>boolean</Enabled>
  <Items>
    <AwsAccountNumber>string</AwsAccountNumber>
  </Items>
  <Quantity>integer</Quantity>
</TrustedSigners>
<ViewerProtocolPolicy>string</ViewerProtocolPolicy>
</CacheBehavior>
</Items>
<Quantity>integer</Quantity>
</CacheBehaviors>
<CallerReference>string</CallerReference>
<Comment>string</Comment>
<CustomErrorResponses>
  <Items>
    <CustomErrorResponse>
      <ErrorCachingMinTTL>long</ErrorCachingMinTTL>
      <ErrorCode>integer</ErrorCode>
      <ResponseCode>string</ResponseCode>
      <ResponsePagePath>string</ResponsePagePath>
    </CustomErrorResponse>
  </Items>
  <Quantity>integer</Quantity>
</CustomErrorResponses>
<DefaultCacheBehavior>
  <AllowedMethods>
    <CachedMethods>
      <Items>
        <Method>string</Method>
      </Items>
      <Quantity>integer</Quantity>
    </CachedMethods>
    <Items>
      <Method>string</Method>
    </Items>
    <Quantity>integer</Quantity>
  </AllowedMethods>
  <Compress>boolean</Compress>
  <DefaultTTL>long</DefaultTTL>
  <FieldLevelEncryptionId>string</FieldLevelEncryptionId>
  <ForwardedValues>
    <Cookies>
      <Forward>string</Forward>
```

```
<WhitelistedNames>
  <Items>
    <Name>string</Name>
  </Items>
  <Quantity>integer</Quantity>
</WhitelistedNames>
</Cookies>
<Headers>
  <Items>
    <Name>string</Name>
  </Items>
  <Quantity>integer</Quantity>
</Headers>
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<QueryStringCacheKeys>
  <Items>
    <Name>string</Name>
  </Items>
  <Quantity>integer</Quantity>
</QueryStringCacheKeys>
</ForwardedValues>
<LambdaFunctionAssociations>
  <Items>
    <LambdaFunctionAssociation>
      <EventType>string</EventType>
      <IncludeBody>boolean</IncludeBody>
      <LambdaFunctionARN>string</LambdaFunctionARN>
    </LambdaFunctionAssociation>
  </Items>
  <Quantity>integer</Quantity>
</LambdaFunctionAssociations>
<MaxTTL>long</MaxTTL>
<MinTTL>long</MinTTL>
<SmoothStreaming>boolean</SmoothStreaming>
<TargetOriginId>string</TargetOriginId>
<TrustedSigners>
  <Enabled>boolean</Enabled>
  <Items>
    <AwsAccountNumber>string</AwsAccountNumber>
  </Items>
  <Quantity>integer</Quantity>
</TrustedSigners>
  <ViewerProtocolPolicy>string</ViewerProtocolPolicy>
</DefaultCacheBehavior>
<DefaultRootObject>string</DefaultRootObject>
<Enabled>boolean</Enabled>
<HttpVersion>string</HttpVersion>
<IsIPV6Enabled>boolean</IsIPV6Enabled>
<Logging>
  <Bucket>string</Bucket>
  <Enabled>boolean</Enabled>
  <IncludeCookies>boolean</IncludeCookies>
  <Prefix>string</Prefix>
</Logging>
<OriginGroups>
  <Items>
    <OriginGroup>
      <FailoverCriteria>
        <StatusCodes>
          <Items>
            <StatusCode>integer</StatusCode>
          </Items>
          <Quantity>integer</Quantity>
        </StatusCodes>
      </FailoverCriteria>
      <Id>string</Id>
    </OriginGroup>
  </Items>
</OriginGroups>
```

```

<Members>
  <Items>
    <OriginGroupMember>
      <OriginId>string</OriginId>
    </OriginGroupMember>
  </Items>
  <Quantity>integer</Quantity>
</Members>
</OriginGroup>
</Items>
<Quantity>integer</Quantity>
</OriginGroups>
<Origins>
  <Items>
    <Origin>
      <CustomHeaders>
        <Items>
          <OriginCustomHeader>
            <HeaderName>string</HeaderName>
            <HeaderValue>string</HeaderValue>
          </OriginCustomHeader>
        </Items>
        <Quantity>integer</Quantity>
      </CustomHeaders>
      <CustomOriginConfig>
        <HTTPPPort>integer</HTTPPPort>
        <HTTPPSPort>integer</HTTPPSPort>
        <OriginKeepaliveTimeout>integer</OriginKeepaliveTimeout>
        <OriginProtocolPolicy>string</OriginProtocolPolicy>
        <OriginReadTimeout>integer</OriginReadTimeout>
        <OriginSslProtocols>
          <Items>
            <SslProtocol>string</SslProtocol>
          </Items>
          <Quantity>integer</Quantity>
        </OriginSslProtocols>
      </CustomOriginConfig>
      <DomainName>string</DomainName>
      <Id>string</Id>
      <OriginPath>string</OriginPath>
      <S3OriginConfig>
        <OriginAccessIdentity>string</OriginAccessIdentity>
      </S3OriginConfig>
    </Origin>
  </Items>
  <Quantity>integer</Quantity>
</Origins>
<PriceClass>string</PriceClass>
<Restrictions>
  <GeoRestriction>
    <Items>
      <Location>string</Location>
    </Items>
    <Quantity>integer</Quantity>
    <RestrictionType>string</RestrictionType>
  </GeoRestriction>
</Restrictions>
<ViewerCertificate>
  <ACMCertificateArn>string</ACMCertificateArn>
  <Certificate>string</Certificate>
  <CertificateSource>string</CertificateSource>
  <CloudFrontDefaultCertificate>boolean</CloudFrontDefaultCertificate>
  <IAMCertificateId>string</IAMCertificateId>
  <MinimumProtocolVersion>string</MinimumProtocolVersion>
  <SSLSupportMethod>string</SSLSupportMethod>
</ViewerCertificate>

```

```
<WebACLId>string</WebACLId>
</DistributionConfig>
<DomainName>string</DomainName>
<Id>string</Id>
<InProgressInvalidationBatches>integer</InProgressInvalidationBatches>
<LastModifiedTime>timestamp</LastModifiedTime>
<Status>string</Status>
</Distribution>
```

## Response Elements

If the action is successful, the service sends back an HTTP 201 response.

The following data is returned in XML format by the service.

### [Distribution \(p. 14\)](#)

Root level tag for the Distribution parameters.

Required: Yes

### [ActiveTrustedSigners \(p. 14\)](#)

CloudFront automatically adds this element to the response only if you've set up the distribution to serve private content with signed URLs. The element lists the key pair IDs that CloudFront is aware of for each trusted signer. The `Signer` child element lists the AWS account number of the trusted signer (or an empty `Self` element if the signer is you). The `Signer` element also includes the IDs of any active key pairs associated with the trusted signer's AWS account. If no `KeyId` element appears for a `Signer`, that signer can't create working signed URLs.

Type: [ActiveTrustedSigners \(p. 198\)](#) object

### [AliasICPRecords \(p. 14\)](#)

AWS services in China customers must file for an Internet Content Provider (ICP) recordal if they want to serve content publicly on an alternate domain name, also known as a CNAME, that they've added to CloudFront. `AliasICPRecordal` provides the ICP recordal status for CNAMEs associated with distributions.

For more information about ICP recordals, see [Signup, Accounts, and Credentials](#) in *Getting Started with AWS services in China*.

Type: Array of [AliasICPRecordal \(p. 200\)](#) objects

### [ARN \(p. 14\)](#)

The ARN (Amazon Resource Name) for the distribution. For example:

`arn:aws:cloudfront::123456789012:distribution/EDFDVBD632BHDS5`, where 123456789012 is your AWS account ID.

Type: String

### [DistributionConfig \(p. 14\)](#)

The current configuration information for the distribution. Send a `GET` request to the `/cloudFront API version/distribution ID/config` resource.

Type: [DistributionConfig \(p. 230\)](#) object

### [DomainName \(p. 14\)](#)

The domain name corresponding to the distribution, for example, `d111111abcdef8.cloudfront.net`.

Type: String

#### **Id (p. 14)**

The identifier for the distribution. For example: EDFDVBD632BHDS5.

Type: String

#### **InProgressInvalidationBatches (p. 14)**

The number of invalidation batches currently in progress.

Type: Integer

#### **LastModifiedTime (p. 14)**

The date and time the distribution was last modified.

Type: Timestamp

#### **Status (p. 14)**

This response element indicates the current status of the distribution. When the status is `Deployed`, the distribution's information is fully propagated to all CloudFront edge locations.

Type: String

## Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 312\)](#).

### **AccessDenied**

Access denied.

HTTP Status Code: 403

### **CNAMEAlreadyExists**

The CNAME specified is already defined for CloudFront.

HTTP Status Code: 409

### **DistributionAlreadyExists**

The caller reference you attempted to create the distribution with is associated with another distribution.

HTTP Status Code: 409

### **IllegalFieldLevelEncryptionConfigAssociationWithCacheBehavior**

The specified configuration for field-level encryption can't be associated with the specified cache behavior.

HTTP Status Code: 400

### **InconsistentQuantities**

The value of `Quantity` and the size of `Items` don't match.

HTTP Status Code: 400

### **InvalidArgumentException**

The argument is invalid.

HTTP Status Code: 400

**InvalidDefaultRootObject**

The default root object file name is too big or contains an invalid character.

HTTP Status Code: 400

**InvalidErrorCode**

An invalid error code was specified.

HTTP Status Code: 400

**InvalidForwardCookies**

Your request contains forward cookies option which doesn't match with the expectation for the whitelisted list of cookie names. Either list of cookie names has been specified when not allowed or list of cookie names is missing when expected.

HTTP Status Code: 400

**InvalidGeoRestrictionParameter**

The specified geo restriction parameter is not valid.

HTTP Status Code: 400

**InvalidHeadersForS3Origin**

The headers specified are not valid for an Amazon S3 origin.

HTTP Status Code: 400

**InvalidLambdaFunctionAssociation**

The specified Lambda function association is invalid.

HTTP Status Code: 400

**InvalidLocationCode**

The location code specified is not valid.

HTTP Status Code: 400

**InvalidMinimumProtocolVersion**

The minimum protocol version specified is not valid.

HTTP Status Code: 400

**InvalidOrigin**

The Amazon S3 origin server specified does not refer to a valid Amazon S3 bucket.

HTTP Status Code: 400

**InvalidOriginAccessIdentity**

The origin access identity is not valid or doesn't exist.

HTTP Status Code: 400

**InvalidOriginKeepaliveTimeout**

The keep alive timeout specified for the origin is not valid.

HTTP Status Code: 400

**InvalidOriginReadTimeout**

The read timeout specified for the origin is not valid.

HTTP Status Code: 400

**InvalidProtocolSettings**

You cannot specify SSLv3 as the minimum protocol version if you only want to support only clients that support Server Name Indication (SNI).

HTTP Status Code: 400

**InvalidQueryStringParameters**

Query string parameters specified in the response body are not valid.

HTTP Status Code: 400

**InvalidRelativePath**

The relative path is too big, is not URL-encoded, or does not begin with a slash (/).

HTTP Status Code: 400

**InvalidRequiredProtocol**

This operation requires the HTTPS protocol. Ensure that you specify the HTTPS protocol in your request, or omit the `RequiredProtocols` element from your distribution configuration.

HTTP Status Code: 400

**InvalidResponseCode**

A response code specified in the response body is not valid.

HTTP Status Code: 400

**InvalidTTLOrder**

TTL order specified in the response body is not valid.

HTTP Status Code: 400

**InvalidViewerCertificate**

A viewer certificate specified in the response body is not valid.

HTTP Status Code: 400

**InvalidWebACLIId**

A web ACL id specified in the response body is not valid.

HTTP Status Code: 400

**MissingBody**

This operation requires a body. Ensure that the body is present and the `Content-Type` header is set.

HTTP Status Code: 400

**NoSuchFieldLevelEncryptionConfig**

The specified configuration for field-level encryption doesn't exist.

HTTP Status Code: 404

**NoSuchOrigin**

No origin exists with the specified `Origin Id`.

HTTP Status Code: 404

**TooManyCacheBehaviors**

You cannot create more cache behaviors for the distribution.

HTTP Status Code: 400

**TooManyCertificates**

You cannot create anymore custom SSL/TLS certificates.

HTTP Status Code: 400

**TooManyCookieNamesInWhiteList**

Your request contains more cookie names in the whitelist than are allowed per cache behavior.

HTTP Status Code: 400

**TooManyDistributionCNAMEs**

Your request contains more CNAMEs than are allowed per distribution.

HTTP Status Code: 400

**TooManyDistributions**

Processing your request would cause you to exceed the maximum number of distributions allowed.

HTTP Status Code: 400

**TooManyDistributionsAssociatedToFieldLevelEncryptionConfig**

The maximum number of distributions have been associated with the specified configuration for field-level encryption.

HTTP Status Code: 400

**TooManyDistributionsWithLambdaAssociations**

Processing your request would cause the maximum number of distributions with Lambda function associations per owner to be exceeded.

HTTP Status Code: 400

**TooManyHeadersInForwardedValues**

Your request contains too many headers in forwarded values.

HTTP Status Code: 400

**TooManyLambdaFunctionAssociations**

Your request contains more Lambda function associations than are allowed per distribution.

HTTP Status Code: 400

**TooManyOriginCustomHeaders**

Your request contains too many origin custom headers.

HTTP Status Code: 400

### **TooManyOriginGroupsPerDistribution**

Processing your request would cause you to exceed the maximum number of origin groups allowed.

HTTP Status Code: 400

### **TooManyOrigins**

You cannot create more origins for the distribution.

HTTP Status Code: 400

### **TooManyQueryStringParameters**

Your request contains too many query string parameters.

HTTP Status Code: 400

### **TooManyTrustedSigners**

Your request contains more trusted signers than are allowed per distribution.

HTTP Status Code: 400

### **TrustedSignerDoesNotExist**

One or more of your trusted signers don't exist.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java](#)
- [AWS SDK for JavaScript](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V2](#)

# CreateDistributionWithTags

Create a new distribution with tags.

## Request Syntax

```
POST /2019-03-26/distribution?WithTags HTTP/1.1
<?xml version="1.0" encoding="UTF-8"?>
<DistributionConfigWithTags xmlns="http://cloudfront.amazonaws.com/doc/2019-03-26/">
  <DistributionConfig>
    <Aliases>
      <Items>
        <CNAME>string</CNAME>
      </Items>
      <Quantity>integer</Quantity>
    </Aliases>
    <CacheBehaviors>
      <Items>
        <CacheBehavior>
          <AllowedMethods>
            <CachedMethods>
              <Items>
                <Method>string</Method>
              </Items>
              <Quantity>integer</Quantity>
            </CachedMethods>
            <Items>
              <Method>string</Method>
            </Items>
            <Quantity>integer</Quantity>
          </AllowedMethods>
          <Compress>boolean</Compress>
          <DefaultTTL>long</DefaultTTL>
          <FieldLevelEncryptionId>string</FieldLevelEncryptionId>
          <ForwardedValues>
            <Cookies>
              <Forward>string</Forward>
            <WhitelistedNames>
              <Items>
                <Name>string</Name>
              </Items>
              <Quantity>integer</Quantity>
            </WhitelistedNames>
          </Cookies>
          <Headers>
            <Items>
              <Name>string</Name>
            </Items>
            <Quantity>integer</Quantity>
          </Headers>
          <QueryString>boolean</QueryString>
          <QueryStringCacheKeys>
            <Items>
              <Name>string</Name>
            </Items>
            <Quantity>integer</Quantity>
          </QueryStringCacheKeys>
        </ForwardedValues>
        <LambdaFunctionAssociations>
          <Items>
            <LambdaFunctionAssociation>
              <EventType>string</EventType>
              <IncludeBody>boolean</IncludeBody>
            </LambdaFunctionAssociation>
          </Items>
        </LambdaFunctionAssociations>
      </CacheBehavior>
    </Items>
  </CacheBehaviors>
</DistributionConfig>
</DistributionConfigWithTags>
```

```
<LambdaFunctionARN>string</LambdaFunctionARN>
    </LambdaFunctionAssociation>
</Items>
<Quantity>integer</Quantity>
</LambdaFunctionAssociations>
<MaxTTL>long</MaxTTL>
<MinTTL>long</MinTTL>
<PathPattern>string</PathPattern>
<SmoothStreaming>boolean</SmoothStreaming>
<TargetOriginId>string</TargetOriginId>
<TrustedSigners>
    <Enabled>boolean</Enabled>
    <Items>
        <AwsAccountNumber>string</AwsAccountNumber>
    </Items>
    <Quantity>integer</Quantity>
</TrustedSigners>
<ViewerProtocolPolicy>string</ViewerProtocolPolicy>
</CacheBehavior>
</Items>
<Quantity>integer</Quantity>
</CacheBehaviors>
<CallerReference>string</CallerReference>
<Comment>string</Comment>
<CustomErrorResponses>
    <Items>
        <CustomErrorResponse>
            <ErrorCachingMinTTL>long</ErrorCachingMinTTL>
            <ErrorCode>integer</ErrorCode>
            <ResponseCode>string</ResponseCode>
            <ResponsePagePath>string</ResponsePagePath>
        </CustomErrorResponse>
    </Items>
    <Quantity>integer</Quantity>
</CustomErrorResponses>
<DefaultCacheBehavior>
    <AllowedMethods>
        <CachedMethods>
            <Items>
                <Method>string</Method>
            </Items>
            <Quantity>integer</Quantity>
        </CachedMethods>
        <Items>
            <Method>string</Method>
        </Items>
        <Quantity>integer</Quantity>
    </AllowedMethods>
    <Compress>boolean</Compress>
    <DefaultTTL>long</DefaultTTL>
    <FieldLevelEncryptionId>string</FieldLevelEncryptionId>
    <ForwardedValues>
        <Cookies>
            <Forward>string</Forward>
        <WhitelistedNames>
            <Items>
                <Name>string</Name>
            </Items>
            <Quantity>integer</Quantity>
        </WhitelistedNames>
    </Cookies>
    <Headers>
        <Items>
            <Name>string</Name>
        </Items>
    </Headers>
    <Quantity>integer</Quantity>

```

```
</Headers>
<QueryString>boolean</QueryString>
<QueryStringCacheKeys>
  <Items>
    <Name>string</Name>
  </Items>
  <Quantity>integer</Quantity>
</QueryStringCacheKeys>
</ForwardedValues>
<LambdaFunctionAssociations>
  <Items>
    <LambdaFunctionAssociation>
      <EventType>string</EventType>
      <IncludeBody>boolean</IncludeBody>
      <LambdaFunctionARN>string</LambdaFunctionARN>
    </LambdaFunctionAssociation>
  </Items>
  <Quantity>integer</Quantity>
</LambdaFunctionAssociations>
<MaxTTL>long</MaxTTL>
<MinTTL>long</MinTTL>
<SmoothStreaming>boolean</SmoothStreaming>
<TargetOriginId>string</TargetOriginId>
<TrustedSigners>
  <Enabled>boolean</Enabled>
  <Items>
    <AwsAccountNumber>string</AwsAccountNumber>
  </Items>
  <Quantity>integer</Quantity>
</TrustedSigners>
<ViewerProtocolPolicy>string</ViewerProtocolPolicy>
</DefaultCacheBehavior>
<DefaultRootObject>string</DefaultRootObject>
<Enabled>boolean</Enabled>
<HttpVersion>string</HttpVersion>
<IsIPV6Enabled>boolean</IsIPV6Enabled>
<Logging>
  <Bucket>string</Bucket>
  <Enabled>boolean</Enabled>
  <IncludeCookies>boolean</IncludeCookies>
  <Prefix>string</Prefix>
</Logging>
<OriginGroups>
  <Items>
    <OriginGroup>
      <FailoverCriteria>
        <StatusCodes>
          <Items>
            <StatusCode>integer</StatusCode>
          </Items>
          <Quantity>integer</Quantity>
        </StatusCodes>
      </FailoverCriteria>
      <Id>string</Id>
      <Members>
        <Items>
          <OriginGroupMember>
            <OriginId>string</OriginId>
          </OriginGroupMember>
        </Items>
        <Quantity>integer</Quantity>
      </Members>
    </OriginGroup>
  </Items>
  <Quantity>integer</Quantity>
</OriginGroups>
```

```
<Origins>
  <Items>
    <Origin>
      <CustomHeaders>
        <Items>
          <OriginCustomHeader>
            <HeaderName>string</HeaderName>
            <HeaderValue>string</HeaderValue>
          </OriginCustomHeader>
        </Items>
        <Quantity>integer</Quantity>
      </CustomHeaders>
      <CustomOriginConfig>
        <HTTPPort>integer</HTTPPort>
        <HTTPSPort>integer</HTTPSPort>
        <OriginKeepaliveTimeout>integer</OriginKeepaliveTimeout>
        <OriginProtocolPolicy>string</OriginProtocolPolicy>
        <OriginReadTimeout>integer</OriginReadTimeout>
        <OriginSslProtocols>
          <Items>
            <SslProtocol>string</SslProtocol>
          </Items>
          <Quantity>integer</Quantity>
        </OriginSslProtocols>
      </CustomOriginConfig>
      <DomainName>string</DomainName>
      <Id>string</Id>
      <OriginPath>string</OriginPath>
      <S3OriginConfig>
        <OriginAccessIdentity>string</OriginAccessIdentity>
      </S3OriginConfig>
    </Origin>
  </Items>
  <Quantity>integer</Quantity>
</Origins>
<PriceClass>string</PriceClass>
<Restrictions>
  <GeoRestriction>
    <Items>
      <Location>string</Location>
    </Items>
    <Quantity>integer</Quantity>
    <RestrictionType>string</RestrictionType>
  </GeoRestriction>
</Restrictions>
<ViewerCertificate>
  <ACMCertificateArn>string</ACMCertificateArn>
  <Certificate>string</Certificate>
  <CertificateSource>string</CertificateSource>
  <CloudFrontDefaultCertificate>boolean</CloudFrontDefaultCertificate>
  <IAMCertificateId>string</IAMCertificateId>
  <MinimumProtocolVersion>string</MinimumProtocolVersion>
  <SSLSupportMethod>string</SSLSupportMethod>
</ViewerCertificate>
<WebACLId>string</WebACLId>
</DistributionConfig>
<Tags>
  <Items>
    <Tag>
      <Key>string</Key>
      <Value>string</Value>
    </Tag>
  </Items>
</Tags>
</DistributionConfigWithTags>
```

## URI Request Parameters

The request does not use any URI parameters.

## Request Body

The request accepts the following data in XML format.

### [DistributionConfigWithTags \(p. 25\)](#)

Root level tag for the DistributionConfigWithTags parameters.

Required: Yes

#### [DistributionConfig \(p. 25\)](#)

A distribution configuration.

Type: [DistributionConfig \(p. 230\)](#) object

Required: Yes

#### [Tags \(p. 25\)](#)

A complex type that contains zero or more Tag elements.

Type: [Tags \(p. 305\)](#) object

Required: Yes

## Response Syntax

```
HTTP/1.1 201
<?xml version="1.0" encoding="UTF-8"?>
<Distribution>
  <ActiveTrustedSigners>
    <Enabled>boolean</Enabled>
    <Items>
      <Signer>
        <AwsAccountNumber>string</AwsAccountNumber>
        <KeyPairIds>
          <Items>
            <KeyPairId>string</KeyPairId>
          </Items>
          <Quantity>integer</Quantity>
        </KeyPairIds>
      </Signer>
    </Items>
    <Quantity>integer</Quantity>
  </ActiveTrustedSigners>
  <AliasICPRecordals>
    <AliasICPRecordal>
      <CNAME>string</CNAME>
      <ICPRecordalStatus>string</ICPRecordalStatus>
    </AliasICPRecordal>
  </AliasICPRecordals>
  <ARN>string</ARN>
  <DistributionConfig>
    <Aliases>
      <Items>
```

```
<CNAME>string</CNAME>
</Items>
<Quantity>integer</Quantity>
</Aliases>
<CacheBehaviors>
<Items>
    <CacheBehavior>
        <AllowedMethods>
            <CachedMethods>
                <Items>
                    <Method>string</Method>
                </Items>
                <Quantity>integer</Quantity>
            </CachedMethods>
            <Items>
                <Method>string</Method>
            </Items>
            <Quantity>integer</Quantity>
        </AllowedMethods>
        <Compress>boolean</Compress>
        <DefaultTTL>long</DefaultTTL>
        <FieldLevelEncryptionId>string</FieldLevelEncryptionId>
        <ForwardedValues>
            <Cookies>
                <Forward>string</Forward>
                <WhitelistedNames>
                    <Items>
                        <Name>string</Name>
                    </Items>
                    <Quantity>integer</Quantity>
                </WhitelistedNames>
            </Cookies>
            <Headers>
                <Items>
                    <Name>string</Name>
                </Items>
                <Quantity>integer</Quantity>
            </Headers>
            <QueryString>boolean</QueryString>
            <QueryStringCacheKeys>
                <Items>
                    <Name>string</Name>
                </Items>
                <Quantity>integer</Quantity>
            </QueryStringCacheKeys>
        </ForwardedValues>
        <LambdaFunctionAssociations>
            <Items>
                <LambdaFunctionAssociation>
                    <EventType>string</EventType>
                    <IncludeBody>boolean</IncludeBody>
                    <LambdaFunctionARN>string</LambdaFunctionARN>
                </LambdaFunctionAssociation>
            </Items>
            <Quantity>integer</Quantity>
        </LambdaFunctionAssociations>
        <MaxTTL>long</MaxTTL>
        <MinTTL>long</MinTTL>
        <PathPattern>string</PathPattern>
        <SmoothStreaming>boolean</SmoothStreaming>
        <TargetOriginId>string</TargetOriginId>
        <TrustedSigners>
            <Enabled>boolean</Enabled>
            <Items>
                <AwsAccountNumber>string</AwsAccountNumber>
            </Items>
        </TrustedSigners>
    </CacheBehavior>
</Items>
```

```
        <Quantity>integer</Quantity>
    </TrustedSigners>
    <ViewerProtocolPolicy>string</ViewerProtocolPolicy>
</CacheBehavior>
</Items>
<Quantity>integer</Quantity>
</CacheBehaviors>
<CallerReference>string</CallerReference>
<Comment>string</Comment>
<CustomErrorResponses>
    <Items>
        <CustomErrorResponse>
            <ErrorCachingMinTTL>long</ErrorCachingMinTTL>
            <ErrorCode>integer</ErrorCode>
            <ResponseCode>string</ResponseCode>
            <ResponsePagePath>string</ResponsePagePath>
        </CustomErrorResponse>
    </Items>
    <Quantity>integer</Quantity>
</CustomErrorResponses>
<DefaultCacheBehavior>
    <AllowedMethods>
        <CachedMethods>
            <Items>
                <Method>string</Method>
            </Items>
            <Quantity>integer</Quantity>
        </CachedMethods>
        <Items>
            <Method>string</Method>
        </Items>
        <Quantity>integer</Quantity>
    </AllowedMethods>
    <Compress>boolean</Compress>
    <DefaultTTL>long</DefaultTTL>
    <FieldLevelEncryptionId>string</FieldLevelEncryptionId>
<ForwardedValues>
    <Cookies>
        <Forward>string</Forward>
        <WhitelistedNames>
            <Items>
                <Name>string</Name>
            </Items>
            <Quantity>integer</Quantity>
        </WhitelistedNames>
    </Cookies>
    <Headers>
        <Items>
            <Name>string</Name>
        </Items>
        <Quantity>integer</Quantity>
    </Headers>
    <QueryString>boolean</QueryString>
    <QueryStringCacheKeys>
        <Items>
            <Name>string</Name>
        </Items>
        <Quantity>integer</Quantity>
    </QueryStringCacheKeys>
</ForwardedValues>
<LambdaFunctionAssociations>
    <Items>
        <LambdaFunctionAssociation>
            <EventType>string</EventType>
            <IncludeBody>boolean</IncludeBody>
            <LambdaFunctionARN>string</LambdaFunctionARN>
        </LambdaFunctionAssociation>
    </Items>
</LambdaFunctionAssociations>
```

```
</LambdaFunctionAssociation>
</Items>
<Quantity>integer</Quantity>
</LambdaFunctionAssociations>
<MaxTTL>long</MaxTTL>
<MinTTL>long</MinTTL>
<SmoothStreaming>boolean</SmoothStreaming>
<TargetOriginId>string</TargetOriginId>
<TrustedSigners>
    <Enabled>boolean</Enabled>
    <Items>
        <AwsAccountNumber>string</AwsAccountNumber>
    </Items>
    <Quantity>integer</Quantity>
</TrustedSigners>
<ViewerProtocolPolicy>string</ViewerProtocolPolicy>
</DefaultCacheBehavior>
<DefaultRootObject>string</DefaultRootObject>
<Enabled>boolean</Enabled>
<HttpVersion>string</HttpVersion>
<IsIPV6Enabled>boolean</IsIPV6Enabled>
<Logging>
    <Bucket>string</Bucket>
    <Enabled>boolean</Enabled>
    <IncludeCookies>boolean</IncludeCookies>
    <Prefix>string</Prefix>
</Logging>
<OriginGroups>
    <Items>
        <OriginGroup>
            <FailoverCriteria>
                <StatusCodes>
                    <Items>
                        <StatusCode>integer</StatusCode>
                    </Items>
                    <Quantity>integer</Quantity>
                </StatusCodes>
            </FailoverCriteria>
            <Id>string</Id>
            <Members>
                <Items>
                    <OriginGroupMember>
                        <OriginId>string</OriginId>
                    </OriginGroupMember>
                </Items>
                <Quantity>integer</Quantity>
            </Members>
        </OriginGroup>
    </Items>
    <Quantity>integer</Quantity>
</OriginGroups>
<Origins>
    <Items>
        <Origin>
            <CustomHeaders>
                <Items>
                    <OriginCustomHeader>
                        <HeaderName>string</HeaderName>
                        <HeaderValue>string</HeaderValue>
                    </OriginCustomHeader>
                </Items>
                <Quantity>integer</Quantity>
            </CustomHeaders>
            <CustomOriginConfig>
                <HTTPPort>integer</HTTPPort>
                <HTTPSPort>integer</HTTPSPort>
```

```

<OriginKeepaliveTimeout>integer</OriginKeepaliveTimeout>
<OriginProtocolPolicy>string</OriginProtocolPolicy>
<OriginReadTimeout>integer</OriginReadTimeout>
<OriginSslProtocols>
    <Items>
        <SslProtocol>string</SslProtocol>
    </Items>
    <Quantity>integer</Quantity>
</OriginSslProtocols>
</CustomOriginConfig>
<DomainName>string</DomainName>
<Id>string</Id>
<OriginPath>string</OriginPath>
<S3OriginConfig>
    <OriginAccessIdentity>string</OriginAccessIdentity>
</S3OriginConfig>
</Origin>
</Items>
<Quantity>integer</Quantity>
</Origins>
<PriceClass>string</PriceClass>
<Restrictions>
    <GeoRestriction>
        <Items>
            <Location>string</Location>
        </Items>
        <Quantity>integer</Quantity>
        <RestrictionType>string</RestrictionType>
    </GeoRestriction>
</Restrictions>
<ViewerCertificate>
    <ACMCertificateArn>string</ACMCertificateArn>
    <Certificate>string</Certificate>
    <CertificateSource>string</CertificateSource>
    <CloudFrontDefaultCertificate>boolean</CloudFrontDefaultCertificate>
    <IAMCertificateId>string</IAMCertificateId>
    <MinimumProtocolVersion>string</MinimumProtocolVersion>
    <SSLSupportMethod>string</SSLSupportMethod>
</ViewerCertificate>
<WebACLId>string</WebACLId>
</DistributionConfig>
<DomainName>string</DomainName>
<Id>string</Id>
<InProgressValidationBatches>integer</InProgressValidationBatches>
<LastModifiedTime>timestampl</LastModifiedTime>
<Status>string</Status>
</Distribution>

```

## Response Elements

If the action is successful, the service sends back an HTTP 201 response.

The following data is returned in XML format by the service.

### [Distribution \(p. 29\)](#)

Root level tag for the Distribution parameters.

Required: Yes

### [ActiveTrustedSigners \(p. 29\)](#)

CloudFront automatically adds this element to the response only if you've set up the distribution to serve private content with signed URLs. The element lists the key pair IDs that CloudFront is aware

of for each trusted signer. The `Signer` child element lists the AWS account number of the trusted signer (or an empty `Self` element if the signer is you). The `Signer` element also includes the IDs of any active key pairs associated with the trusted signer's AWS account. If no `KeyPairId` element appears for a `Signer`, that signer can't create working signed URLs.

Type: [ActiveTrustedSigners \(p. 198\)](#) object

#### [AliasICPRecords \(p. 29\)](#)

AWS services in China customers must file for an Internet Content Provider (ICP) recordal if they want to serve content publicly on an alternate domain name, also known as a CNAME, that they've added to CloudFront. `AliasICPRecordal` provides the ICP recordal status for CNAMES associated with distributions.

For more information about ICP recordals, see [Signup, Accounts, and Credentials](#) in *Getting Started with AWS services in China*.

Type: Array of [AliasICPRecordal \(p. 200\)](#) objects

#### [ARN \(p. 29\)](#)

The ARN (Amazon Resource Name) for the distribution. For example:

`arn:aws:cloudfront::123456789012:distribution/EDFDVBD632BHDS5`, where `123456789012` is your AWS account ID.

Type: String

#### [DistributionConfig \(p. 29\)](#)

The current configuration information for the distribution. Send a `GET` request to the `/CloudFront API version/distribution ID/config` resource.

Type: [DistributionConfig \(p. 230\)](#) object

#### [DomainName \(p. 29\)](#)

The domain name corresponding to the distribution, for example, `d111111abcdef8.cloudfront.net`.

Type: String

#### [Id \(p. 29\)](#)

The identifier for the distribution. For example: `EDFDVBD632BHDS5`.

Type: String

#### [InProgressInvalidationBatches \(p. 29\)](#)

The number of invalidation batches currently in progress.

Type: Integer

#### [LastModifiedTime \(p. 29\)](#)

The date and time the distribution was last modified.

Type: Timestamp

#### [Status \(p. 29\)](#)

This response element indicates the current status of the distribution. When the status is `Deployed`, the distribution's information is fully propagated to all CloudFront edge locations.

Type: String

## Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 312\)](#).

### **AccessDenied**

Access denied.

HTTP Status Code: 403

### **CNAMEAlreadyExists**

The CNAME specified is already defined for CloudFront.

HTTP Status Code: 409

### **DistributionAlreadyExists**

The caller reference you attempted to create the distribution with is associated with another distribution.

HTTP Status Code: 409

### **IllegalFieldLevelEncryptionConfigAssociationWithCacheBehavior**

The specified configuration for field-level encryption can't be associated with the specified cache behavior.

HTTP Status Code: 400

### **InconsistentQuantities**

The value of `Quantity` and the size of `Items` don't match.

HTTP Status Code: 400

### **InvalidArgumentException**

The argument is invalid.

HTTP Status Code: 400

### **InvalidDefaultRootObject**

The default root object file name is too big or contains an invalid character.

HTTP Status Code: 400

### **InvalidErrorCode**

An invalid error code was specified.

HTTP Status Code: 400

### **InvalidForwardCookies**

Your request contains forward cookies option which doesn't match with the expectation for the whitelisted list of cookie names. Either list of cookie names has been specified when not allowed or list of cookie names is missing when expected.

HTTP Status Code: 400

### **InvalidGeoRestrictionParameter**

The specified geo restriction parameter is not valid.

HTTP Status Code: 400

**InvalidHeadersForS3Origin**

The headers specified are not valid for an Amazon S3 origin.

HTTP Status Code: 400

**InvalidLambdaFunctionAssociation**

The specified Lambda function association is invalid.

HTTP Status Code: 400

**InvalidLocationCode**

The location code specified is not valid.

HTTP Status Code: 400

**InvalidMinimumProtocolVersion**

The minimum protocol version specified is not valid.

HTTP Status Code: 400

**InvalidOrigin**

The Amazon S3 origin server specified does not refer to a valid Amazon S3 bucket.

HTTP Status Code: 400

**InvalidOriginAccessIdentity**

The origin access identity is not valid or doesn't exist.

HTTP Status Code: 400

**InvalidOriginKeepaliveTimeout**

The keep alive timeout specified for the origin is not valid.

HTTP Status Code: 400

**InvalidOriginReadTimeout**

The read timeout specified for the origin is not valid.

HTTP Status Code: 400

**InvalidProtocolSettings**

You cannot specify SSLv3 as the minimum protocol version if you only want to support only clients that support Server Name Indication (SNI).

HTTP Status Code: 400

**InvalidQueryStringParameters**

Query string parameters specified in the response body are not valid.

HTTP Status Code: 400

**InvalidRelativePath**

The relative path is too big, is not URL-encoded, or does not begin with a slash (/).

HTTP Status Code: 400

**InvalidRequiredProtocol**

This operation requires the HTTPS protocol. Ensure that you specify the HTTPS protocol in your request, or omit the `RequiredProtocols` element from your distribution configuration.

HTTP Status Code: 400

**InvalidResponseCode**

A response code specified in the response body is not valid.

HTTP Status Code: 400

**InvalidTagging**

Tagging specified in the response body is not valid.

HTTP Status Code: 400

**InvalidTTLOrder**

TTL order specified in the response body is not valid.

HTTP Status Code: 400

**InvalidViewerCertificate**

A viewer certificate specified in the response body is not valid.

HTTP Status Code: 400

**InvalidWebACLId**

A web ACL id specified in the response body is not valid.

HTTP Status Code: 400

**MissingBody**

This operation requires a body. Ensure that the body is present and the `Content-Type` header is set.

HTTP Status Code: 400

**NoSuchFieldLevelEncryptionConfig**

The specified configuration for field-level encryption doesn't exist.

HTTP Status Code: 404

**NoSuchOrigin**

No origin exists with the specified `Origin Id`.

HTTP Status Code: 404

**TooManyCacheBehaviors**

You cannot create more cache behaviors for the distribution.

HTTP Status Code: 400

**TooManyCertificates**

You cannot create anymore custom SSL/TLS certificates.

HTTP Status Code: 400

**TooManyCookieNamesInWhiteList**

Your request contains more cookie names in the whitelist than are allowed per cache behavior.

HTTP Status Code: 400

**TooManyDistributionCNAMEs**

Your request contains more CNAMEs than are allowed per distribution.

HTTP Status Code: 400

**TooManyDistributions**

Processing your request would cause you to exceed the maximum number of distributions allowed.

HTTP Status Code: 400

**TooManyDistributionsAssociatedToFieldLevelEncryptionConfig**

The maximum number of distributions have been associated with the specified configuration for field-level encryption.

HTTP Status Code: 400

**TooManyDistributionsWithLambdaAssociations**

Processing your request would cause the maximum number of distributions with Lambda function associations per owner to be exceeded.

HTTP Status Code: 400

**TooManyHeadersInForwardedValues**

Your request contains too many headers in forwarded values.

HTTP Status Code: 400

**TooManyLambdaFunctionAssociations**

Your request contains more Lambda function associations than are allowed per distribution.

HTTP Status Code: 400

**TooManyOriginCustomHeaders**

Your request contains too many origin custom headers.

HTTP Status Code: 400

**TooManyOriginGroupsPerDistribution**

Processing your request would cause you to exceed the maximum number of origin groups allowed.

HTTP Status Code: 400

**TooManyOrigins**

You cannot create more origins for the distribution.

HTTP Status Code: 400

**TooManyQueryStringParameters**

Your request contains too many query string parameters.

HTTP Status Code: 400

**TooManyTrustedSigners**

Your request contains more trusted signers than are allowed per distribution.

HTTP Status Code: 400

**TrustedSignerDoesNotExist**

One or more of your trusted signers don't exist.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java](#)
- [AWS SDK for JavaScript](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V2](#)

# CreateFieldLevelEncryptionConfig

Create a new field-level encryption configuration.

## Request Syntax

```
POST /2019-03-26/field-level-encryption HTTP/1.1
<?xml version="1.0" encoding="UTF-8"?>
<FieldLevelEncryptionConfig xmlns="http://cloudfront.amazonaws.com/doc/2019-03-26/">
  <CallerReference>string</CallerReference>
  <Comment>string</Comment>
  <ContentTypeProfileConfig>
    <ContentTypeProfiles>
      <Items>
        <ContentTypeProfile>
          <ContentType>string</ContentType>
          <Format>string</Format>
          <ProfileId>string</ProfileId>
        </ContentTypeProfile>
      </Items>
      <Quantity>integer</Quantity>
    </ContentTypeProfiles>
    <ForwardWhenContentTypeIsUnknown>boolean</ForwardWhenContentTypeIsUnknown>
  </ContentTypeProfileConfig>
  <QueryArgProfileConfig>
    <ForwardWhenQueryArgProfileIsUnknown>boolean</ForwardWhenQueryArgProfileIsUnknown>
    <QueryArgProfiles>
      <Items>
        <QueryArgProfile>
          <ProfileId>string</ProfileId>
          <QueryArg>string</QueryArg>
        </QueryArgProfile>
      </Items>
      <Quantity>integer</Quantity>
    </QueryArgProfiles>
  </QueryArgProfileConfig>
</FieldLevelEncryptionConfig>
```

## URI Request Parameters

The request does not use any URI parameters.

## Request Body

The request accepts the following data in XML format.

### [FieldLevelEncryptionConfig \(p. 40\)](#)

Root level tag for the FieldLevelEncryptionConfig parameters.

Required: Yes

### [CallerReference \(p. 40\)](#)

A unique number that ensures the request can't be replayed.

Type: String

Required: Yes

### Comment (p. 40)

An optional comment about the configuration.

Type: String

Required: No

### ContentTypeProfileConfig (p. 40)

A complex data type that specifies when to forward content if a content type isn't recognized and profiles to use as by default in a request if a query argument doesn't specify a profile to use.

Type: [ContentTypeProfileConfig \(p. 215\)](#) object

Required: No

### QueryArgProfileConfig (p. 40)

A complex data type that specifies when to forward content if a profile isn't found and the profile that can be provided as a query argument in a request.

Type: [QueryArgProfileConfig \(p. 285\)](#) object

Required: No

## Response Syntax

```
HTTP/1.1 201
<?xml version="1.0" encoding="UTF-8"?>
<FieldLevelEncryption>
  <FieldLevelEncryptionConfig>
    <CallerReference>string</CallerReference>
    <Comment>string</Comment>
    <ContentTypeProfileConfig>
      <ContentTypeProfiles>
        <Items>
          <ContentTypeProfile>
            <ContentType>string</ContentType>
            <Format>string</Format>
            <ProfileId>string</ProfileId>
          </ContentTypeProfile>
        </Items>
        <Quantity>integer</Quantity>
      </ContentTypeProfiles>
      <ForwardWhenContentTypeIsUnknown>boolean</ForwardWhenContentTypeIsUnknown>
    </ContentTypeProfileConfig>
    <QueryArgProfileConfig>
      <ForwardWhenQueryArgProfileIsUnknown>boolean</ForwardWhenQueryArgProfileIsUnknown>
      <QueryArgProfiles>
        <Items>
          <QueryArgProfile>
            <ProfileId>string</ProfileId>
            <QueryArg>string</QueryArg>
          </QueryArgProfile>
        </Items>
        <Quantity>integer</Quantity>
      </QueryArgProfiles>
    </QueryArgProfileConfig>
  </FieldLevelEncryptionConfig>
  <Id>string</Id>
  <LastModifiedTime>timestamp</LastModifiedTime>
</FieldLevelEncryption>
```

## Response Elements

If the action is successful, the service sends back an HTTP 201 response.

The following data is returned in XML format by the service.

### **FieldLevelEncryption (p. 41)**

Root level tag for the FieldLevelEncryption parameters.

Required: Yes

### **FieldLevelEncryptionConfig (p. 41)**

A complex data type that includes the profile configurations specified for field-level encryption.

Type: [FieldLevelEncryptionConfig \(p. 244\)](#) object

### **Id (p. 41)**

The configuration ID for a field-level encryption configuration which includes a set of profiles that specify certain selected data fields to be encrypted by specific public keys.

Type: String

### **LastModifiedTime (p. 41)**

The last time the field-level encryption configuration was changed.

Type: Timestamp

## Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 312\)](#).

### **FieldLevelEncryptionConfigAlreadyExists**

The specified configuration for field-level encryption already exists.

HTTP Status Code: 409

### **InconsistentQuantities**

The value of `Quantity` and the size of `Items` don't match.

HTTP Status Code: 400

### **InvalidArgumentException**

The argument is invalid.

HTTP Status Code: 400

### **NoSuchFieldLevelEncryptionProfile**

The specified profile for field-level encryption doesn't exist.

HTTP Status Code: 404

### **QueryArgProfileEmpty**

No profile specified for the field-level encryption query argument.

HTTP Status Code: 400

### **TooManyFieldLevelEncryptionConfigs**

The maximum number of configurations for field-level encryption have been created.

HTTP Status Code: 400

### **TooManyFieldLevelEncryptionContentTypeProfiles**

The maximum number of content type profiles for field-level encryption have been created.

HTTP Status Code: 400

### **TooManyFieldLevelEncryptionQueryArgProfiles**

The maximum number of query arg profiles for field-level encryption have been created.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java](#)
- [AWS SDK for JavaScript](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V2](#)

# CreateFieldLevelEncryptionProfile

Create a field-level encryption profile.

## Request Syntax

```
POST /2019-03-26/field-level-encryption-profile HTTP/1.1
<?xml version="1.0" encoding="UTF-8"?>
<FieldLevelEncryptionProfileConfig xmlns="http://cloudfront.amazonaws.com/doc/2019-03-26/">
  <CallerReference>string</CallerReference>
  <Comment>string</Comment>
  <EncryptionEntities>
    <Items>
      <EncryptionEntity>
        <FieldPatterns>
          <Items>
            <FieldPattern>string</FieldPattern>
          </Items>
          <Quantity>integer</Quantity>
        </FieldPatterns>
        <ProviderId>string</ProviderId>
        <PublicKeyId>string</PublicKeyId>
      </EncryptionEntity>
    </Items>
    <Quantity>integer</Quantity>
  </EncryptionEntities>
  <Name>string</Name>
</FieldLevelEncryptionProfileConfig>
```

## URI Request Parameters

The request does not use any URI parameters.

## Request Body

The request accepts the following data in XML format.

### FieldLevelEncryptionProfileConfig (p. 44)

Root level tag for the FieldLevelEncryptionProfileConfig parameters.

Required: Yes

#### CallerReference (p. 44)

A unique number that ensures that the request can't be replayed.

Type: String

Required: Yes

#### Comment (p. 44)

An optional comment for the field-level encryption profile.

Type: String

Required: No

### [EncryptionEntities \(p. 44\)](#)

A complex data type of encryption entities for the field-level encryption profile that include the public key ID, provider, and field patterns for specifying which fields to encrypt with this key.

Type: [EncryptionEntities \(p. 241\)](#) object

Required: Yes

### [Name \(p. 44\)](#)

Profile name for the field-level encryption profile.

Type: String

Required: Yes

## Response Syntax

```
HTTP/1.1 201
<?xml version="1.0" encoding="UTF-8"?>
<FieldLevelEncryptionProfile>
  <FieldLevelEncryptionProfileConfig>
    <CallerReference>string</CallerReference>
    <Comment>string</Comment>
    <EncryptionEntities>
      <Items>
        <EncryptionEntity>
          <FieldPatterns>
            <Items>
              <FieldPattern>string</FieldPattern>
            </Items>
            <Quantity>integer</Quantity>
          </FieldPatterns>
          <ProviderId>string</ProviderId>
          <PublicKeyId>string</PublicKeyId>
        </EncryptionEntity>
      </Items>
      <Quantity>integer</Quantity>
    </EncryptionEntities>
    <Name>string</Name>
  </FieldLevelEncryptionProfileConfig>
  <Id>string</Id>
  <LastModifiedTime>timestamp</LastModifiedTime>
</FieldLevelEncryptionProfile>
```

## Response Elements

If the action is successful, the service sends back an HTTP 201 response.

The following data is returned in XML format by the service.

### [FieldLevelEncryptionProfile \(p. 45\)](#)

Root level tag for the FieldLevelEncryptionProfile parameters.

Required: Yes

### [FieldLevelEncryptionProfileConfig \(p. 45\)](#)

A complex data type that includes the profile name and the encryption entities for the field-level encryption profile.

Type: [FieldLevelEncryptionProfileConfig \(p. 247\)](#) object

**Id (p. 45)**

The ID for a field-level encryption profile configuration which includes a set of profiles that specify certain selected data fields to be encrypted by specific public keys.

Type: String

**LastModifiedTime (p. 45)**

The last time the field-level encryption profile was updated.

Type: Timestamp

## Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 312\)](#).

**FieldLevelEncryptionProfileAlreadyExists**

The specified profile for field-level encryption already exists.

HTTP Status Code: 409

**FieldLevelEncryptionProfileSizeExceeded**

The maximum size of a profile for field-level encryption was exceeded.

HTTP Status Code: 400

**InconsistentQuantities**

The value of `Quantity` and the size of `Items` don't match.

HTTP Status Code: 400

**InvalidArgumentException**

The argument is invalid.

HTTP Status Code: 400

**NoSuchPublicKey**

The specified public key doesn't exist.

HTTP Status Code: 404

**TooManyFieldLevelEncryptionEncryptionEntities**

The maximum number of encryption entities for field-level encryption have been created.

HTTP Status Code: 400

**TooManyFieldLevelEncryptionFieldPatterns**

The maximum number of field patterns for field-level encryption have been created.

HTTP Status Code: 400

**TooManyFieldLevelEncryptionProfiles**

The maximum number of profiles for field-level encryption have been created.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java](#)
- [AWS SDK for JavaScript](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V2](#)

# CreateInvalidation

Create a new invalidation.

## Request Syntax

```
POST /2019-03-26/distribution/DistributionId/invalidation HTTP/1.1
<?xml version="1.0" encoding="UTF-8"?>
<InvalidationBatch xmlns="http://cloudfront.amazonaws.com/doc/2019-03-26/">
  <CallerReference>string</CallerReference>
  <Paths>
    <Items>
      <Path>string</Path>
    </Items>
    <Quantity>integer</Quantity>
  </Paths>
</InvalidationBatch>
```

## URI Request Parameters

The request does not use any URI parameters.

## Request Body

The request accepts the following data in XML format.

### InvalidationBatch (p. 48)

Root level tag for the InvalidationToken parameters.

Required: Yes

#### CallerReference (p. 48)

A value that you specify to uniquely identify an invalidation request. CloudFront uses the value to prevent you from accidentally resubmitting an identical request. Whenever you create a new invalidation request, you must specify a new value for `CallerReference` and change other values in the request as applicable. One way to ensure that the value of `CallerReference` is unique is to use a timestamp, for example, 20120301090000.

If you make a second invalidation request with the same value for `CallerReference`, and if the rest of the request is the same, CloudFront doesn't create a new invalidation request. Instead, CloudFront returns information about the invalidation request that you previously created with the same `CallerReference`.

If `CallerReference` is a value you already sent in a previous invalidation batch request but the content of any `Path` is different from the original request, CloudFront returns an `InvalidationTokenAlreadyExists` error.

Type: String

Required: Yes

#### Paths (p. 48)

A complex type that contains information about the objects that you want to invalidate. For more information, see [Specifying the Objects to Invalidate](#) in the *Amazon CloudFront Developer Guide*.

Type: [Paths \(p. 279\)](#) object

Required: Yes

## Response Syntax

```
HTTP/1.1 201
<?xml version="1.0" encoding="UTF-8"?>
<Invalidation>
  <CreateTime>timestamp</CreateTime>
  <Id>string</Id>
  <InvalidationBatch>
    <CallerReference>string</CallerReference>
    <Paths>
      <Items>
        <Path>string</Path>
      </Items>
      <Quantity>integer</Quantity>
    </Paths>
  </InvalidationBatch>
  <Status>string</Status>
</Invalidation>
```

## Response Elements

If the action is successful, the service sends back an HTTP 201 response.

The following data is returned in XML format by the service.

### [Invalidation \(p. 49\)](#)

Root level tag for the Invalidations parameters.

Required: Yes

#### [CreateTime \(p. 49\)](#)

The date and time the invalidation request was first made.

Type: Timestamp

#### [Id \(p. 49\)](#)

The identifier for the invalidation request. For example: IDFDVBD632BHDS5.

Type: String

#### [InvalidationBatch \(p. 49\)](#)

The current invalidation information for the batch request.

Type: [InvalidationBatch \(p. 259\)](#) object

#### [Status \(p. 49\)](#)

The status of the invalidation request. When the invalidation batch is finished, the status is Completed.

Type: String

## Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 312\)](#).

### **AccessDenied**

Access denied.

HTTP Status Code: 403

### **BatchTooLarge**

Invalidation batch specified is too large.

HTTP Status Code: 413

### **InconsistentQuantities**

The value of `Quantity` and the size of `Items` don't match.

HTTP Status Code: 400

### **InvalidArgumentException**

The argument is invalid.

HTTP Status Code: 400

### **MissingBody**

This operation requires a body. Ensure that the body is present and the `Content-Type` header is set.

HTTP Status Code: 400

### **NoSuchDistribution**

The specified distribution does not exist.

HTTP Status Code: 404

### **TooManyInvalidationsInProgress**

You have exceeded the maximum number of allowable `InProgress` invalidation batch requests, or invalidation objects.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java](#)
- [AWS SDK for JavaScript](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V2](#)

## CreatePublicKey

Add a new public key to CloudFront to use, for example, for field-level encryption. You can add a maximum of 10 public keys with one AWS account.

### Request Syntax

```
POST /2019-03-26/public-key HTTP/1.1
<?xml version="1.0" encoding="UTF-8"?>
<PublicKeyConfig xmlns="http://cloudfront.amazonaws.com/doc/2019-03-26/">
  <CallerReference>string</CallerReference>
  <Comment>string</Comment>
  <EncodedKey>string</EncodedKey>
  <Name>string</Name>
</PublicKeyConfig>
```

### URI Request Parameters

The request does not use any URI parameters.

### Request Body

The request accepts the following data in XML format.

#### PublicKeyConfig (p. 51)

Root level tag for the PublicKeyConfig parameters.

Required: Yes

#### CallerReference (p. 51)

A unique number that ensures that the request can't be replayed.

Type: String

Required: Yes

#### Comment (p. 51)

An optional comment about a public key.

Type: String

Required: No

#### EncodedKey (p. 51)

The encoded public key that you want to add to CloudFront to use with features like field-level encryption.

Type: String

Required: Yes

#### Name (p. 51)

The name for a public key you add to CloudFront to use with features like field-level encryption.

Type: String

Required: Yes

## Response Syntax

```
HTTP/1.1 201
<?xml version="1.0" encoding="UTF-8"?>
<PublicKey>
  <CreatedTime>timestamp</CreatedTime>
  <Id>string</Id>
  <PublicKeyConfig>
    <CallerReference>string</CallerReference>
    <Comment>string</Comment>
    <EncodedKey>string</EncodedKey>
    <Name>string</Name>
  </PublicKeyConfig>
</PublicKey>
```

## Response Elements

If the action is successful, the service sends back an HTTP 201 response.

The following data is returned in XML format by the service.

### [PublicKey \(p. 52\)](#)

Root level tag for the PublicKey parameters.

Required: Yes

### [CreatedTime \(p. 52\)](#)

A time you added a public key to CloudFront.

Type: Timestamp

### [Id \(p. 52\)](#)

A unique ID assigned to a public key you've added to CloudFront.

Type: String

### [PublicKeyConfig \(p. 52\)](#)

A complex data type for a public key you add to CloudFront to use with features like field-level encryption.

Type: [PublicKeyConfig \(p. 281\)](#) object

## Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 312\)](#).

### **InvalidArgumentException**

The argument is invalid.

HTTP Status Code: 400

### PublicKeyAlreadyExists

The specified public key already exists.

HTTP Status Code: 409

### TooManyPublicKeys

The maximum number of public keys for field-level encryption have been created. To create a new public key, delete one of the existing keys.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java](#)
- [AWS SDK for JavaScript](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V2](#)

# CreateStreamingDistribution

Creates a new RTMP distribution. An RTMP distribution is similar to a web distribution, but an RTMP distribution streams media files using the Adobe Real-Time Messaging Protocol (RTMP) instead of serving files using HTTP.

To create a new distribution, submit a `POST` request to the *CloudFront API version/distribution* resource. The request body must include a document with a `StreamingDistributionConfig` element. The response echoes the `StreamingDistributionConfig` element and returns other information about the RTMP distribution.

To get the status of your request, use the *GET StreamingDistribution* API action. When the value of `Enabled` is `true` and the value of `Status` is `Deployed`, your distribution is ready. A distribution usually deploys in less than 15 minutes.

For more information about web distributions, see [Working with RTMP Distributions](#) in the *Amazon CloudFront Developer Guide*.

## Important

Beginning with the 2012-05-05 version of the CloudFront API, we made substantial changes to the format of the XML document that you include in the request body when you create or update a web distribution or an RTMP distribution, and when you invalidate objects. With previous versions of the API, we discovered that it was too easy to accidentally delete one or more values for an element that accepts multiple values, for example, CNAMEs and trusted signers. Our changes for the 2012-05-05 release are intended to prevent these accidental deletions and to notify you when there's a mismatch between the number of values you say you're specifying in the `Quantity` element and the number of values specified.

## Request Syntax

```
POST /2019-03-26/streaming-distribution HTTP/1.1
<?xml version="1.0" encoding="UTF-8"?>
<StreamingDistributionConfig xmlns="http://cloudfront.amazonaws.com/doc/2019-03-26/">
  <Aliases>
    <Items>
      <CNAME>string</CNAME>
    </Items>
    <Quantity>integer</Quantity>
  </Aliases>
  <CallerReference>string</CallerReference>
  <Comment>string</Comment>
  <Enabled>boolean</Enabled>
  <Logging>
    <Bucket>string</Bucket>
    <Enabled>boolean</Enabled>
    <Prefix>string</Prefix>
  </Logging>
  <PriceClass>string</PriceClass>
  <S3Origin>
    <DomainName>string</DomainName>
    <OriginAccessIdentity>string</OriginAccessIdentity>
  </S3Origin>
  <TrustedSigners>
    <Enabled>boolean</Enabled>
    <Items>
      <AwsAccountNumber>string</AwsAccountNumber>
    </Items>
    <Quantity>integer</Quantity>
  </TrustedSigners>
</StreamingDistributionConfig>
```

## URI Request Parameters

The request does not use any URI parameters.

## Request Body

The request accepts the following data in XML format.

### [StreamingDistributionConfig \(p. 54\)](#)

Root level tag for the StreamingDistributionConfig parameters.

Required: Yes

### [Aliases \(p. 54\)](#)

A complex type that contains information about CNAMEs (alternate domain names), if any, for this streaming distribution.

Type: [Aliases \(p. 199\)](#) object

Required: No

### [CallerReference \(p. 54\)](#)

A unique value (for example, a date-time stamp) that ensures that the request can't be replayed.

If the value of CallerReference is new (regardless of the content of the StreamingDistributionConfig object), CloudFront creates a new distribution.

If CallerReference is a value that you already sent in a previous request to create a distribution, CloudFront returns a DistributionAlreadyExists error.

Type: String

Required: Yes

### [Comment \(p. 54\)](#)

Any comments you want to include about the streaming distribution.

Type: String

Required: Yes

### [Enabled \(p. 54\)](#)

Whether the streaming distribution is enabled to accept user requests for content.

Type: Boolean

Required: Yes

### [Logging \(p. 54\)](#)

A complex type that controls whether access logs are written for the streaming distribution.

Type: [StreamingLoggingConfig \(p. 302\)](#) object

Required: No

### [PriceClass \(p. 54\)](#)

A complex type that contains information about price class for this streaming distribution.

Type: String

Valid Values: PriceClass\_100 | PriceClass\_200 | PriceClass\_All

Required: No

#### S3Origin (p. 54)

A complex type that contains information about the Amazon S3 bucket from which you want CloudFront to get your media files for distribution.

Type: [S3Origin \(p. 289\)](#) object

Required: Yes

#### TrustedSigners (p. 54)

A complex type that specifies any AWS accounts that you want to permit to create signed URLs for private content. If you want the distribution to use signed URLs, include this element; if you want the distribution to use public URLs, remove this element. For more information, see [Serving Private Content through CloudFront](#) in the *Amazon CloudFront Developer Guide*.

Type: [TrustedSigners \(p. 306\)](#) object

Required: Yes

## Response Syntax

```
HTTP/1.1 201
<?xml version="1.0" encoding="UTF-8"?>
<StreamingDistribution>
  <ActiveTrustedSigners>
    <Enabled>boolean</Enabled>
    <Items>
      <Signer>
        <AwsAccountNumber>string</AwsAccountNumber>
        <KeyPairIds>
          <Items>
            <KeyId>string</KeyId>
          </Items>
          <Quantity>integer</Quantity>
        </KeyPairIds>
      </Signer>
    </Items>
    <Quantity>integer</Quantity>
  </ActiveTrustedSigners>
  <ARN>string</ARN>
  <DomainName>string</DomainName>
  <Id>string</Id>
  <LastModifiedTime>timestamp</LastModifiedTime>
  <Status>string</Status>
  <StreamingDistributionConfig>
    <Aliases>
      <Items>
        <CNAME>string</CNAME>
      </Items>
        <Quantity>integer</Quantity>
    </Aliases>
    <CallerReference>string</CallerReference>
    <Comment>string</Comment>
    <Enabled>boolean</Enabled>
    <Logging>
      <Bucket>string</Bucket>
```

```

<Enabled>boolean</Enabled>
<Prefix>string</Prefix>
</Logging>
<PriceClass>string</PriceClass>
<S3Origin>
  <DomainName>string</DomainName>
  <OriginAccessIdentity>string</OriginAccessIdentity>
</S3Origin>
<TrustedSigners>
  <Enabled>boolean</Enabled>
  <Items>
    <AwsAccountNumber>string</AwsAccountNumber>
  </Items>
  <Quantity>integer</Quantity>
</TrustedSigners>
</StreamingDistributionConfig>
</StreamingDistribution>

```

## Response Elements

If the action is successful, the service sends back an HTTP 201 response.

The following data is returned in XML format by the service.

### **StreamingDistribution (p. 56)**

Root level tag for the StreamingDistribution parameters.

Required: Yes

### **ActiveTrustedSigners (p. 56)**

A complex type that lists the AWS accounts, if any, that you included in the TrustedSigners complex type for this distribution. These are the accounts that you want to allow to create signed URLs for private content.

The Signer complex type lists the AWS account number of the trusted signer or self if the signer is the AWS account that created the distribution. The Signer element also includes the IDs of any active CloudFront key pairs that are associated with the trusted signer's AWS account. If no KeyPairId element appears for a Signer, that signer can't create signed URLs.

For more information, see [Serving Private Content through CloudFront](#) in the *Amazon CloudFront Developer Guide*.

Type: [ActiveTrustedSigners \(p. 198\)](#) object

### **ARN (p. 56)**

The ARN (Amazon Resource Name) for the distribution. For example:

arn:aws:cloudfront::123456789012:distribution/EDFDVBD632BHDS5, where 123456789012 is your AWS account ID.

Type: String

### **DomainName (p. 56)**

The domain name that corresponds to the streaming distribution, for example, s5c39gqb8ow64r.cloudfront.net.

Type: String

### **Id (p. 56)**

The identifier for the RTMP distribution. For example: EGTXBD79EXAMPLE.

Type: String

[LastModifiedTime \(p. 56\)](#)

The date and time that the distribution was last modified.

Type: Timestamp

[Status \(p. 56\)](#)

The current status of the RTMP distribution. When the status is `Deployed`, the distribution's information is propagated to all CloudFront edge locations.

Type: String

[StreamingDistributionConfig \(p. 56\)](#)

The current configuration information for the RTMP distribution.

Type: [StreamingDistributionConfig \(p. 295\)](#) object

## Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 312\)](#).

**AccessDenied**

Access denied.

HTTP Status Code: 403

**CNAMEAlreadyExists**

The CNAME specified is already defined for CloudFront.

HTTP Status Code: 409

**InconsistentQuantities**

The value of `Quantity` and the size of `Items` don't match.

HTTP Status Code: 400

**InvalidArgumentException**

The argument is invalid.

HTTP Status Code: 400

**InvalidOrigin**

The Amazon S3 origin server specified does not refer to a valid Amazon S3 bucket.

HTTP Status Code: 400

**InvalidOriginAccessIdentity**

The origin access identity is not valid or doesn't exist.

HTTP Status Code: 400

**MissingBody**

This operation requires a body. Ensure that the body is present and the `Content-Type` header is set.

HTTP Status Code: 400

**StreamingDistributionAlreadyExists**

The caller reference you attempted to create the streaming distribution with is associated with another distribution

HTTP Status Code: 409

**TooManyStreamingDistributionCNAMEs**

Your request contains more CNAMEs than are allowed per distribution.

HTTP Status Code: 400

**TooManyStreamingDistributions**

Processing your request would cause you to exceed the maximum number of streaming distributions allowed.

HTTP Status Code: 400

**TooManyTrustedSigners**

Your request contains more trusted signers than are allowed per distribution.

HTTP Status Code: 400

**TrustedSignerDoesNotExist**

One or more of your trusted signers don't exist.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java](#)
- [AWS SDK for JavaScript](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V2](#)

# CreateStreamingDistributionWithTags

Create a new streaming distribution with tags.

## Request Syntax

```
POST /2019-03-26/streaming-distribution?WithTags HTTP/1.1
<?xml version="1.0" encoding="UTF-8"?>
<StreamingDistributionConfigWithTags xmlns="http://cloudfront.amazonaws.com/
doc/2019-03-26/">
  <StreamingDistributionConfig>
    <Aliases>
      <Items>
        <CNAME>string</CNAME>
      </Items>
      <Quantity>integer</Quantity>
    </Aliases>
    <CallerReference>string</CallerReference>
    <Comment>string</Comment>
    <Enabled>boolean</Enabled>
    <Logging>
      <Bucket>string</Bucket>
      <Enabled>boolean</Enabled>
      <Prefix>string</Prefix>
    </Logging>
    <PriceClass>string</PriceClass>
    <S3Origin>
      <DomainName>string</DomainName>
      <OriginAccessIdentity>string</OriginAccessIdentity>
    </S3Origin>
    <TrustedSigners>
      <Enabled>boolean</Enabled>
      <Items>
        <AwsAccountNumber>string</AwsAccountNumber>
      </Items>
      <Quantity>integer</Quantity>
    </TrustedSigners>
  </StreamingDistributionConfig>
  <Tags>
    <Items>
      <Tag>
        <Key>string</Key>
        <Value>string</Value>
      </Tag>
    </Items>
  </Tags>
</StreamingDistributionConfigWithTags>
```

## URI Request Parameters

The request does not use any URI parameters.

## Request Body

The request accepts the following data in XML format.

### StreamingDistributionConfigWithTags (p. 60)

Root level tag for the StreamingDistributionConfigWithTags parameters.

Required: Yes

### [StreamingDistributionConfig \(p. 60\)](#)

A streaming distribution Configuration.

Type: [StreamingDistributionConfig \(p. 295\)](#) object

Required: Yes

### [Tags \(p. 60\)](#)

A complex type that contains zero or more Tag elements.

Type: [Tags \(p. 305\)](#) object

Required: Yes

## Response Syntax

```
HTTP/1.1 201
<?xml version="1.0" encoding="UTF-8"?>
<StreamingDistribution>
  <ActiveTrustedSigners>
    <Enabled>boolean</Enabled>
    <Items>
      <Signer>
        <AwsAccountNumber>string</AwsAccountNumber>
        <KeyPairIds>
          <Items>
            <KeyPairId>string</KeyPairId>
          </Items>
          <Quantity>integer</Quantity>
        </KeyPairIds>
      </Signer>
    </Items>
    <Quantity>integer</Quantity>
  </ActiveTrustedSigners>
  <ARN>string</ARN>
  <DomainName>string</DomainName>
  <Id>string</Id>
  <LastModifiedTime>timestamp</LastModifiedTime>
  <Status>string</Status>
  <StreamingDistributionConfig>
    <Aliases>
      <Items>
        <CNAME>string</CNAME>
      </Items>
      <Quantity>integer</Quantity>
    </Aliases>
    <CallerReference>string</CallerReference>
    <Comment>string</Comment>
    <Enabled>boolean</Enabled>
    <Logging>
      <Bucket>string</Bucket>
      <Enabled>boolean</Enabled>
      <Prefix>string</Prefix>
    </Logging>
    <PriceClass>string</PriceClass>
    <S3Origin>
      <DomainName>string</DomainName>
      <OriginAccessIdentity>string</OriginAccessIdentity>
    </S3Origin>
    <TrustedSigners>
```

```
<Enabled>boolean</Enabled>
<Items>
  <AwsAccountNumber>string</AwsAccountNumber>
</Items>
<Quantity>integer</Quantity>
</TrustedSigners>
</StreamingDistributionConfig>
</StreamingDistribution>
```

## Response Elements

If the action is successful, the service sends back an HTTP 201 response.

The following data is returned in XML format by the service.

### **StreamingDistribution (p. 61)**

Root level tag for the StreamingDistribution parameters.

Required: Yes

#### **ActiveTrustedSigners (p. 61)**

A complex type that lists the AWS accounts, if any, that you included in the TrustedSigners complex type for this distribution. These are the accounts that you want to allow to create signed URLs for private content.

The Signer complex type lists the AWS account number of the trusted signer or self if the signer is the AWS account that created the distribution. The Signer element also includes the IDs of any active CloudFront key pairs that are associated with the trusted signer's AWS account. If no KeyPairId element appears for a Signer, that signer can't create signed URLs.

For more information, see [Serving Private Content through CloudFront](#) in the *Amazon CloudFront Developer Guide*.

Type: [ActiveTrustedSigners \(p. 198\)](#) object

#### **ARN (p. 61)**

The ARN (Amazon Resource Name) for the distribution. For example:

arn:aws:cloudfront::123456789012:distribution/EDFDVBD632BHDS5, where 123456789012 is your AWS account ID.

Type: String

#### **DomainName (p. 61)**

The domain name that corresponds to the streaming distribution, for example, s5c39gqb8ow64r.cloudfront.net.

Type: String

#### **Id (p. 61)**

The identifier for the RTMP distribution. For example: EGTXBD79EXAMPLE.

Type: String

#### **LastModifiedTime (p. 61)**

The date and time that the distribution was last modified.

Type: Timestamp

## [Status \(p. 61\)](#)

The current status of the RTMP distribution. When the status is `Deployed`, the distribution's information is propagated to all CloudFront edge locations.

Type: String

## [StreamingDistributionConfig \(p. 61\)](#)

The current configuration information for the RTMP distribution.

Type: [StreamingDistributionConfig \(p. 295\)](#) object

# Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 312\)](#).

### **AccessDenied**

Access denied.

HTTP Status Code: 403

### **CNAMEAlreadyExists**

The CNAME specified is already defined for CloudFront.

HTTP Status Code: 409

### **InconsistentQuantities**

The value of `Quantity` and the size of `Items` don't match.

HTTP Status Code: 400

### **InvalidArgument**

The argument is invalid.

HTTP Status Code: 400

### **InvalidOrigin**

The Amazon S3 origin server specified does not refer to a valid Amazon S3 bucket.

HTTP Status Code: 400

### **InvalidOriginAccessIdentity**

The origin access identity is not valid or doesn't exist.

HTTP Status Code: 400

### **InvalidTagging**

Tagging specified in the response body is not valid.

HTTP Status Code: 400

### **MissingBody**

This operation requires a body. Ensure that the body is present and the `Content-Type` header is set.

HTTP Status Code: 400

### **StreamingDistributionAlreadyExists**

The caller reference you attempted to create the streaming distribution with is associated with another distribution

HTTP Status Code: 409

### **TooManyStreamingDistributionCNAMEs**

Your request contains more CNAMEs than are allowed per distribution.

HTTP Status Code: 400

### **TooManyStreamingDistributions**

Processing your request would cause you to exceed the maximum number of streaming distributions allowed.

HTTP Status Code: 400

### **TooManyTrustedSigners**

Your request contains more trusted signers than are allowed per distribution.

HTTP Status Code: 400

### **TrustedSignerDoesNotExist**

One or more of your trusted signers don't exist.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java](#)
- [AWS SDK for JavaScript](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V2](#)

# DeleteCloudFrontOriginAccessIdentity

Delete an origin access identity.

## Request Syntax

```
DELETE /2019-03-26/origin-access-identity/cloudfront/Id HTTP/1.1
If-Match: IfMatch
```

## URI Request Parameters

The request requires the following URI parameters.

### **Id** (p. 65)

The origin access identity's ID.

### **If-Match** (p. 65)

The value of the `ETag` header you received from a previous `GET` or `PUT` request. For example:  
`E2QWRUHAPOMQZL`.

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 204
```

## Response Elements

If the action is successful, the service sends back an HTTP 204 response with an empty HTTP body.

## Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 312\)](#).

### **AccessDenied**

Access denied.

HTTP Status Code: 403

### **CloudFrontOriginAccessIdentityInUse**

The Origin Access Identity specified is already in use.

HTTP Status Code: 409

### **InvalidIfMatchVersion**

The `If-Match` version is missing or not valid for the distribution.

HTTP Status Code: 400

**NoSuchCloudFrontOriginAccessIdentity**

The specified origin access identity does not exist.

HTTP Status Code: 404

**PreconditionFailed**

The precondition given in one or more of the request-header fields evaluated to `false`.

HTTP Status Code: 412

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java](#)
- [AWS SDK for JavaScript](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V2](#)

# DeleteDistribution

Delete a distribution.

## Request Syntax

```
DELETE /2019-03-26/distribution/Id HTTP/1.1
If-Match: IfMatch
```

## URI Request Parameters

The request requires the following URI parameters.

### **Id** (p. 67)

The distribution ID.

### **If-Match** (p. 67)

The value of the `ETag` header that you received when you disabled the distribution. For example: `E2QWRUHAPOMQZL`.

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 204
```

## Response Elements

If the action is successful, the service sends back an HTTP 204 response with an empty HTTP body.

## Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 312\)](#).

### **AccessDenied**

Access denied.

HTTP Status Code: 403

### **DistributionNotDisabled**

The specified CloudFront distribution is not disabled. You must disable the distribution before you can delete it.

HTTP Status Code: 409

### **InvalidIfMatchVersion**

The `If-Match` version is missing or not valid for the distribution.

HTTP Status Code: 400

**NoSuchDistribution**

The specified distribution does not exist.

HTTP Status Code: 404

**PreconditionFailed**

The precondition given in one or more of the request-header fields evaluated to `false`.

HTTP Status Code: 412

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java](#)
- [AWS SDK for JavaScript](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V2](#)

# DeleteFieldLevelEncryptionConfig

Remove a field-level encryption configuration.

## Request Syntax

```
DELETE /2019-03-26/field-level-encryption/Id HTTP/1.1
If-Match: IfMatch
```

## URI Request Parameters

The request requires the following URI parameters.

### **Id** (p. 69)

The ID of the configuration you want to delete from CloudFront.

### **If-Match** (p. 69)

The value of the `ETag` header that you received when retrieving the configuration identity to delete.  
For example: `E2QWRUHAPOMOZL`.

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 204
```

## Response Elements

If the action is successful, the service sends back an HTTP 204 response with an empty HTTP body.

## Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 312\)](#).

### **AccessDenied**

Access denied.

HTTP Status Code: 403

### **FieldLevelEncryptionConfigInUse**

The specified configuration for field-level encryption is in use.

HTTP Status Code: 409

### **InvalidIfMatchVersion**

The `If-Match` version is missing or not valid for the distribution.

HTTP Status Code: 400

**NoSuchFieldLevelEncryptionConfig**

The specified configuration for field-level encryption doesn't exist.

HTTP Status Code: 404

**PreconditionFailed**

The precondition given in one or more of the request-header fields evaluated to `false`.

HTTP Status Code: 412

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java](#)
- [AWS SDK for JavaScript](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V2](#)

# DeleteFieldLevelEncryptionProfile

Remove a field-level encryption profile.

## Request Syntax

```
DELETE /2019-03-26/field-level-encryption-profile/Id HTTP/1.1
If-Match: IfMatch
```

## URI Request Parameters

The request requires the following URI parameters.

### **Id** (p. 71)

Request the ID of the profile you want to delete from CloudFront.

### **If-Match** (p. 71)

The value of the `ETag` header that you received when retrieving the profile to delete. For example: `E2QWRUHAPOMQZL`.

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 204
```

## Response Elements

If the action is successful, the service sends back an HTTP 204 response with an empty HTTP body.

## Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 312\)](#).

### **AccessDenied**

Access denied.

HTTP Status Code: 403

### **FieldLevelEncryptionProfileInUse**

The specified profile for field-level encryption is in use.

HTTP Status Code: 409

### **InvalidIfMatchVersion**

The `If-Match` version is missing or not valid for the distribution.

HTTP Status Code: 400

**NoSuchFieldLevelEncryptionProfile**

The specified profile for field-level encryption doesn't exist.

HTTP Status Code: 404

**PreconditionFailed**

The precondition given in one or more of the request-header fields evaluated to `false`.

HTTP Status Code: 412

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java](#)
- [AWS SDK for JavaScript](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V2](#)

# DeletePublicKey

Remove a public key you previously added to CloudFront.

## Request Syntax

```
DELETE /2019-03-26/public-key/Id HTTP/1.1
If-Match: IfMatch
```

## URI Request Parameters

The request requires the following URI parameters.

### **Id** (p. 73)

The ID of the public key you want to remove from CloudFront.

### **If-Match** (p. 73)

The value of the `ETag` header that you received when retrieving the public key identity to delete. For example: `E2QWRUHAPOMOZL`.

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 204
```

## Response Elements

If the action is successful, the service sends back an HTTP 204 response with an empty HTTP body.

## Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 312\)](#).

### **AccessDenied**

Access denied.

HTTP Status Code: 403

### **InvalidIfMatchVersion**

The `If-Match` version is missing or not valid for the distribution.

HTTP Status Code: 400

### **NoSuchPublicKey**

The specified public key doesn't exist.

HTTP Status Code: 404

**PreconditionFailed**

The precondition given in one or more of the request-header fields evaluated to `false`.

HTTP Status Code: 412

**PublicKeyInUse**

The specified public key is in use.

HTTP Status Code: 409

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java](#)
- [AWS SDK for JavaScript](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V2](#)

# DeleteStreamingDistribution

Delete a streaming distribution. To delete an RTMP distribution using the CloudFront API, perform the following steps.

## To delete an RTMP distribution using the CloudFront API:

1. Disable the RTMP distribution.
2. Submit a `GET Streaming Distribution Config` request to get the current configuration and the `Etag` header for the distribution.
3. Update the XML document that was returned in the response to your `GET Streaming Distribution Config` request to change the value of `Enabled` to `false`.
4. Submit a `PUT Streaming Distribution Config` request to update the configuration for your distribution. In the request body, include the XML document that you updated in Step 3. Then set the value of the `HTTP If-Match` header to the value of the `ETag` header that CloudFront returned when you submitted the `GET Streaming Distribution Config` request in Step 2.
5. Review the response to the `PUT Streaming Distribution Config` request to confirm that the distribution was successfully disabled.
6. Submit a `GET Streaming Distribution Config` request to confirm that your changes have propagated. When propagation is complete, the value of `Status` is `Deployed`.
7. Submit a `DELETE Streaming Distribution` request. Set the value of the `HTTP If-Match` header to the value of the `ETag` header that CloudFront returned when you submitted the `GET Streaming Distribution Config` request in Step 2.
8. Review the response to your `DELETE Streaming Distribution` request to confirm that the distribution was successfully deleted.

For information about deleting a distribution using the CloudFront console, see [Deleting a Distribution](#) in the *Amazon CloudFront Developer Guide*.

## Request Syntax

```
DELETE /2019-03-26/streaming-distribution/Id HTTP/1.1
If-Match: IfMatch
```

## URI Request Parameters

The request requires the following URI parameters.

### [Id \(p. 75\)](#)

The distribution ID.

### [If-Match \(p. 75\)](#)

The value of the `ETag` header that you received when you disabled the streaming distribution. For example: `E2QWRUHAPOMQZL`.

## Request Body

The request does not have a request body.

## Response Syntax

HTTP/1.1 204

## Response Elements

If the action is successful, the service sends back an HTTP 204 response with an empty HTTP body.

## Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 312\)](#).

### **AccessDenied**

Access denied.

HTTP Status Code: 403

### **InvalidIfMatchVersion**

The `If-Match` version is missing or not valid for the distribution.

HTTP Status Code: 400

### **NoSuchStreamingDistribution**

The specified streaming distribution does not exist.

HTTP Status Code: 404

### **PreconditionFailed**

The precondition given in one or more of the request-header fields evaluated to `false`.

HTTP Status Code: 412

### **StreamingDistributionNotDisabled**

The specified CloudFront distribution is not disabled. You must disable the distribution before you can delete it.

HTTP Status Code: 409

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java](#)
- [AWS SDK for JavaScript](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V2](#)



# GetCloudFrontOriginAccessIdentity

Get the information about an origin access identity.

## Request Syntax

```
GET /2019-03-26/origin-access-identity/cloudfront/Id HTTP/1.1
```

## URI Request Parameters

The request requires the following URI parameters.

### [Id \(p. 78\)](#)

The identity's ID.

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
<?xml version="1.0" encoding="UTF-8"?>
<CloudFrontOriginAccessIdentity>
  <CloudFrontOriginAccessIdentityConfig>
    <CallerReference>string</CallerReference>
    <Comment>string</Comment>
  </CloudFrontOriginAccessIdentityConfig>
  <Id>string</Id>
  <S3CanonicalUserId>string</S3CanonicalUserId>
</CloudFrontOriginAccessIdentity>
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in XML format by the service.

### [CloudFrontOriginAccessIdentity \(p. 78\)](#)

Root level tag for the CloudFrontOriginAccessIdentity parameters.

Required: Yes

### [CloudFrontOriginAccessIdentityConfig \(p. 78\)](#)

The current configuration information for the identity.

Type: [CloudFrontOriginAccessIdentityConfig \(p. 210\)](#) object

### [Id \(p. 78\)](#)

The ID for the origin access identity, for example, E74FTE3AJFJ256A.

Type: String

### **S3CanonicalUserId (p. 78)**

The Amazon S3 canonical user ID for the origin access identity, used when giving the origin access identity read permission to an object in Amazon S3.

Type: String

## Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 312\)](#).

### **AccessDenied**

Access denied.

HTTP Status Code: 403

### **NoSuchCloudFrontOriginAccessIdentity**

The specified origin access identity does not exist.

HTTP Status Code: 404

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java](#)
- [AWS SDK for JavaScript](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V2](#)

# GetCloudFrontOriginAccessIdentityConfig

Get the configuration information about an origin access identity.

## Request Syntax

```
GET /2019-03-26/origin-access-identity/cloudfront/Id/config HTTP/1.1
```

## URI Request Parameters

The request requires the following URI parameters.

### **Id** (p. 80)

The identity's ID.

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
<?xml version="1.0" encoding="UTF-8"?>
<CloudFrontOriginAccessIdentityConfig>
  <CallerReference>string</CallerReference>
  <Comment>string</Comment>
</CloudFrontOriginAccessIdentityConfig>
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in XML format by the service.

### **CloudFrontOriginAccessIdentityConfig** (p. 80)

Root level tag for the CloudFrontOriginAccessIdentityConfig parameters.

Required: Yes

### **CallerReference** (p. 80)

A unique value (for example, a date-time stamp) that ensures that the request can't be replayed.

If the value of **CallerReference** is new (regardless of the content of the **CloudFrontOriginAccessIdentityConfig** object), a new origin access identity is created.

If the **CallerReference** is a value already sent in a previous identity request, and the content of the **CloudFrontOriginAccessIdentityConfig** is identical to the original request (ignoring white space), the response includes the same information returned to the original request.

If the **CallerReference** is a value you already sent in a previous request to create an identity, but the content of the **CloudFrontOriginAccessIdentityConfig** is different from the original request, CloudFront returns a **CloudFrontOriginAccessIdentityAlreadyExists** error.

Type: String

**Comment (p. 80)**

Any comments you want to include about the origin access identity.

Type: String

## Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 312\)](#).

### AccessDenied

Access denied.

HTTP Status Code: 403

### NoSuchCloudFrontOriginAccessIdentity

The specified origin access identity does not exist.

HTTP Status Code: 404

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java](#)
- [AWS SDK for JavaScript](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V2](#)

# GetDistribution

Get the information about a distribution.

## Request Syntax

```
GET /2019-03-26/distribution/Id HTTP/1.1
```

## URI Request Parameters

The request requires the following URI parameters.

### **Id** (p. 82)

The distribution's ID. If the ID is empty, an empty distribution configuration is returned.

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
<?xml version="1.0" encoding="UTF-8"?>
<Distribution>
  <ActiveTrustedSigners>
    <Enabled>boolean</Enabled>
    <Items>
      <Signer>
        <AwsAccountNumber>string</AwsAccountNumber>
        <KeyPairIds>
          <Items>
            <KeyPairId>string</KeyPairId>
          </Items>
          <Quantity>integer</Quantity>
        </KeyPairIds>
      </Signer>
    </Items>
    <Quantity>integer</Quantity>
  </ActiveTrustedSigners>
  <AliasICPRecords>
    <AliasICPRecord>
      <CNAME>string</CNAME>
      <ICPRecordStatus>string</ICPRecordStatus>
    </AliasICPRecord>
  </AliasICPRecords>
  <ARN>string</ARN>
  <DistributionConfig>
    <Aliases>
      <Items>
        <CNAME>string</CNAME>
      </Items>
      <Quantity>integer</Quantity>
    </Aliases>
    <CacheBehaviors>
      <Items>
        <CacheBehavior>
```

```
<AllowedMethods>
  <CachedMethods>
    <Items>
      <Method>string</Method>
    </Items>
    <Quantity>integer</Quantity>
  </CachedMethods>
  <Items>
    <Method>string</Method>
  </Items>
  <Quantity>integer</Quantity>
</AllowedMethods>
<Compress>boolean</Compress>
<DefaultTTL>long</DefaultTTL>
<FieldLevelEncryptionId>string</FieldLevelEncryptionId>
<ForwardedValues>
  <Cookies>
    <Forward>string</Forward>
  <WhitelistedNames>
    <Items>
      <Name>string</Name>
    </Items>
    <Quantity>integer</Quantity>
  </WhitelistedNames>
  <Cookies>
  <Headers>
    <Items>
      <Name>string</Name>
    </Items>
    <Quantity>integer</Quantity>
  </Headers>
  <QueryString>boolean</QueryString>
  <QueryStringCacheKeys>
    <Items>
      <Name>string</Name>
    </Items>
    <Quantity>integer</Quantity>
  </QueryStringCacheKeys>
</ForwardedValues>
<LambdaFunctionAssociations>
  <Items>
    <LambdaFunctionAssociation>
      <EventType>string</EventType>
      <IncludeBody>boolean</IncludeBody>
      <LambdaFunctionARN>string</LambdaFunctionARN>
    </LambdaFunctionAssociation>
  </Items>
  <Quantity>integer</Quantity>
</LambdaFunctionAssociations>
<MaxTTL>long</MaxTTL>
<MinTTL>long</MinTTL>
<PathPattern>string</PathPattern>
<SmoothStreaming>boolean</SmoothStreaming>
<TargetOriginId>string</TargetOriginId>
<TrustedSigners>
  <Enabled>boolean</Enabled>
  <Items>
    <AwsAccountNumber>string</AwsAccountNumber>
  </Items>
  <Quantity>integer</Quantity>
</TrustedSigners>
<ViewerProtocolPolicy>string</ViewerProtocolPolicy>
</CacheBehavior>
</Items>
<Quantity>integer</Quantity>
</CacheBehaviors>
```

```
<CallerReference>string</CallerReference>
<Comment>string</Comment>
<CustomErrorResponses>
  <Items>
    <CustomErrorResponse>
      <ErrorCachingMinTTL>long</ErrorCachingMinTTL>
      <ErrorCode>integer</ErrorCode>
      <ResponseCode>string</ResponseCode>
      <ResponsePagePath>string</ResponsePagePath>
    </CustomErrorResponse>
  </Items>
  <Quantity>integer</Quantity>
</CustomErrorResponses>
<DefaultCacheBehavior>
  <AllowedMethods>
    <CachedMethods>
      <Items>
        <Method>string</Method>
      </Items>
      <Quantity>integer</Quantity>
    </CachedMethods>
    <Items>
      <Method>string</Method>
    </Items>
    <Quantity>integer</Quantity>
  </AllowedMethods>
  <Compress>boolean</Compress>
  <DefaultTTL>long</DefaultTTL>
  <FieldLevelEncryptionId>string</FieldLevelEncryptionId>
  <ForwardedValues>
    <Cookies>
      <Forward>string</Forward>
    <WhitelistedNames>
      <Items>
        <Name>string</Name>
      </Items>
      <Quantity>integer</Quantity>
    </WhitelistedNames>
  </Cookies>
  <Headers>
    <Items>
      <Name>string</Name>
    </Items>
    <Quantity>integer</Quantity>
  </Headers>
  <QueryString>boolean</QueryString>
  <QueryStringCacheKeys>
    <Items>
      <Name>string</Name>
    </Items>
    <Quantity>integer</Quantity>
  </QueryStringCacheKeys>
  <ForwardedValues>
    <LambdaFunctionAssociations>
      <Items>
        <LambdaFunctionAssociation>
          <EventType>string</EventType>
          <IncludeBody>boolean</IncludeBody>
          <LambdaFunctionARN>string</LambdaFunctionARN>
        </LambdaFunctionAssociation>
      </Items>
      <Quantity>integer</Quantity>
    </LambdaFunctionAssociations>
    <MaxTTL>long</MaxTTL>
    <MinTTL>long</MinTTL>
    <SmoothStreaming>boolean</SmoothStreaming>
  </ForwardedValues>
</DefaultCacheBehavior>
```

```
<TargetOriginId>string</TargetOriginId>
<TrustedSigners>
  <Enabled>boolean</Enabled>
  <Items>
    <AwsAccountNumber>string</AwsAccountNumber>
  </Items>
  <Quantity>integer</Quantity>
</TrustedSigners>
<ViewerProtocolPolicy>string</ViewerProtocolPolicy>
</DefaultCacheBehavior>
<DefaultRootObject>string</DefaultRootObject>
<Enabled>boolean</Enabled>
<HttpVersion>string</HttpVersion>
<IsIPV6Enabled>boolean</IsIPV6Enabled>
<Logging>
  <Bucket>string</Bucket>
  <Enabled>boolean</Enabled>
  <IncludeCookies>boolean</IncludeCookies>
  <Prefix>string</Prefix>
</Logging>
<OriginGroups>
  <Items>
    <OriginGroup>
      <FailoverCriteria>
        <StatusCodes>
          <Items>
            <StatusCode>integer</StatusCode>
          </Items>
          <Quantity>integer</Quantity>
        </StatusCodes>
      </FailoverCriteria>
      <Id>string</Id>
      <Members>
        <Items>
          <OriginGroupMember>
            <OriginId>string</OriginId>
          </OriginGroupMember>
        </Items>
        <Quantity>integer</Quantity>
      </Members>
    </OriginGroup>
  </Items>
  <Quantity>integer</Quantity>
</OriginGroups>
<Origins>
  <Items>
    <Origin>
      <CustomHeaders>
        <Items>
          <OriginCustomHeader>
            <HeaderName>string</HeaderName>
            <HeaderValue>string</HeaderValue>
          </OriginCustomHeader>
        </Items>
        <Quantity>integer</Quantity>
      </CustomHeaders>
      <CustomOriginConfig>
        <HTTPPort>integer</HTTPPort>
        <HTTPSPort>integer</HTTPSPort>
        <OriginKeepaliveTimeout>integer</OriginKeepaliveTimeout>
        <OriginProtocolPolicy>string</OriginProtocolPolicy>
        <OriginReadTimeout>integer</OriginReadTimeout>
        <OriginSslProtocols>
          <Items>
            <SslProtocol>string</SslProtocol>
          </Items>
        </OriginSslProtocols>
      </CustomOriginConfig>
    </Origin>
  </Items>

```

```

<Quantity>integer</Quantity>
</OriginSslProtocols>
</CustomOriginConfig>
<DomainName>string</DomainName>
<Id>string</Id>
<OriginPath>string</OriginPath>
<S3OriginConfig>
    <OriginAccessIdentity>string</OriginAccessIdentity>
</S3OriginConfig>
</Origin>
</Items>
<Quantity>integer</Quantity>
</Origins>
<PriceClass>string</PriceClass>
<Restrictions>
    <GeoRestriction>
        <Items>
            <Location>string</Location>
        </Items>
        <Quantity>integer</Quantity>
        <RestrictionType>string</RestrictionType>
    </GeoRestriction>
</Restrictions>
<ViewerCertificate>
    <ACMCertificateArn>string</ACMCertificateArn>
    <Certificate>string</Certificate>
    <CertificateSource>string</CertificateSource>
    <CloudFrontDefaultCertificate>boolean</CloudFrontDefaultCertificate>
    <IAMCertificateId>string</IAMCertificateId>
    <MinimumProtocolVersion>string</MinimumProtocolVersion>
    <SSLSupportMethod>string</SSLSupportMethod>
</ViewerCertificate>
    <WebACLId>string</WebACLId>
</DistributionConfig>
<DomainName>string</DomainName>
<Id>string</Id>
<InProgressInvalidationBatches>integer</InProgressInvalidationBatches>
<LastModifiedTime>timestampl</LastModifiedTime>
<Status>string</Status>
</Distribution>

```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in XML format by the service.

### [Distribution \(p. 82\)](#)

Root level tag for the Distribution parameters.

Required: Yes

### [ActiveTrustedSigners \(p. 82\)](#)

CloudFront automatically adds this element to the response only if you've set up the distribution to serve private content with signed URLs. The element lists the key pair IDs that CloudFront is aware of for each trusted signer. The `Signer` child element lists the AWS account number of the trusted signer (or an empty `Self` element if the signer is you). The `Signer` element also includes the IDs of any active key pairs associated with the trusted signer's AWS account. If no `KeyId` element appears for a `Signer`, that signer can't create working signed URLs.

Type: [ActiveTrustedSigners \(p. 198\)](#) object

### [AliasICPRecords \(p. 82\)](#)

AWS services in China customers must file for an Internet Content Provider (ICP) recordal if they want to serve content publicly on an alternate domain name, also known as a CNAME, that they've added to CloudFront. AliasICPRecordal provides the ICP recordal status for CNAMES associated with distributions.

For more information about ICP recordals, see [Signup, Accounts, and Credentials](#) in *Getting Started with AWS services in China*.

Type: Array of [AliasICPRecordal \(p. 200\)](#) objects

### [ARN \(p. 82\)](#)

The ARN (Amazon Resource Name) for the distribution. For example:

`arn:aws:cloudfront::123456789012:distribution/EDFDVBD632BHDS5`, where 123456789012 is your AWS account ID.

Type: String

### [DistributionConfig \(p. 82\)](#)

The current configuration information for the distribution. Send a `GET` request to the `/cloudFront API version/distribution ID/config` resource.

Type: [DistributionConfig \(p. 230\)](#) object

### [DomainName \(p. 82\)](#)

The domain name corresponding to the distribution, for example, `d111111abcdef8.cloudfront.net`.

Type: String

### [Id \(p. 82\)](#)

The identifier for the distribution. For example: `EDFDVBD632BHDS5`.

Type: String

### [InProgressInvalidationBatches \(p. 82\)](#)

The number of invalidation batches currently in progress.

Type: Integer

### [LastModifiedTime \(p. 82\)](#)

The date and time the distribution was last modified.

Type: Timestamp

### [Status \(p. 82\)](#)

This response element indicates the current status of the distribution. When the status is `Deployed`, the distribution's information is fully propagated to all CloudFront edge locations.

Type: String

## Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 312\)](#).

**AccessDenied**

Access denied.

HTTP Status Code: 403

**NoSuchDistribution**

The specified distribution does not exist.

HTTP Status Code: 404

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java](#)
- [AWS SDK for JavaScript](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V2](#)

# GetDistributionConfig

Get the configuration information about a distribution.

## Request Syntax

```
GET /2019-03-26/distribution/Id/config HTTP/1.1
```

## URI Request Parameters

The request requires the following URI parameters.

### **Id** (p. 89)

The distribution's ID. If the ID is empty, an empty distribution configuration is returned.

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
<?xml version="1.0" encoding="UTF-8"?>
<DistributionConfig>
  <Aliases>
    <Items>
      <CNAME>string</CNAME>
    </Items>
    <Quantity>integer</Quantity>
  </Aliases>
  <CacheBehaviors>
    <Items>
      <CacheBehavior>
        <AllowedMethods>
          <CachedMethods>
            <Items>
              <Method>string</Method>
            </Items>
            <Quantity>integer</Quantity>
          </CachedMethods>
        <Items>
          <Method>string</Method>
        </Items>
        <Quantity>integer</Quantity>
      </AllowedMethods>
      <Compress>boolean</Compress>
      <DefaultTTL>long</DefaultTTL>
      <FieldLevelEncryptionId>string</FieldLevelEncryptionId>
    </Items>
  </CacheBehaviors>
  <ForwardedValues>
    <Cookies>
      <Forward>string</Forward>
    <WhitelistedNames>
      <Items>
        <Name>string</Name>
      </Items>
    </WhitelistedNames>
  </ForwardedValues>
</DistributionConfig>
```

```
<Quantity>integer</Quantity>
</WhitelistedNames>
</Cookies>
<Headers>
  <Items>
    <Name>string</Name>
  </Items>
  <Quantity>integer</Quantity>
</Headers>
<QueryString>boolean</QueryString>
<QueryStringCacheKeys>
  <Items>
    <Name>string</Name>
  </Items>
  <Quantity>integer</Quantity>
</QueryStringCacheKeys>
</ForwardedValues>
<LambdaFunctionAssociations>
  <Items>
    <LambdaFunctionAssociation>
      <EventType>string</EventType>
      <IncludeBody>boolean</IncludeBody>
      <LambdaFunctionARN>string</LambdaFunctionARN>
    </LambdaFunctionAssociation>
  </Items>
  <Quantity>integer</Quantity>
</LambdaFunctionAssociations>
<MaxTTL>long</MaxTTL>
<MinTTL>long</MinTTL>
<PathPattern>string</PathPattern>
<SmoothStreaming>boolean</SmoothStreaming>
<TargetOriginId>string</TargetOriginId>
<TrustedSigners>
  <Enabled>boolean</Enabled>
  <Items>
    <AwsAccountNumber>string</AwsAccountNumber>
  </Items>
  <Quantity>integer</Quantity>
</TrustedSigners>
<ViewerProtocolPolicy>string</ViewerProtocolPolicy>
  </CacheBehavior>
</Items>
<Quantity>integer</Quantity>
</CacheBehaviors>
<CallerReference>string</CallerReference>
<Comment>string</Comment>
<CustomErrorResponses>
  <Items>
    <CustomErrorResponse>
      <ErrorCachingMinTTL>long</ErrorCachingMinTTL>
      <ErrorCode>integer</ErrorCode>
      <ResponseCode>string</ResponseCode>
      <ResponsePagePath>string</ResponsePagePath>
    </CustomErrorResponse>
  </Items>
  <Quantity>integer</Quantity>
</CustomErrorResponses>
<DefaultCacheBehavior>
  <AllowedMethods>
    <CachedMethods>
      <Items>
        <Method>string</Method>
      </Items>
      <Quantity>integer</Quantity>
    </CachedMethods>
  <Items>
```

```

<Method>string</Method>
</Items>
<Quantity>integer</Quantity>
</AllowedMethods>
<Compress>boolean</Compress>
<DefaultTTL>long</DefaultTTL>
<FieldLevelEncryptionId>string</FieldLevelEncryptionId>
<ForwardedValues>
    <Cookies>
        <Forward>string</Forward>
        <WhitelistedNames>
            <Items>
                <Name>string</Name>
            </Items>
                <Quantity>integer</Quantity>
            </WhitelistedNames>
        </Cookies>
    <Headers>
        <Items>
            <Name>string</Name>
        </Items>
            <Quantity>integer</Quantity>
    </Headers>
    <QueryString>boolean</QueryString>
    <QueryStringCacheKeys>
        <Items>
            <Name>string</Name>
        </Items>
            <Quantity>integer</Quantity>
        </QueryStringCacheKeys>
    </ForwardedValues>
    <LambdaFunctionAssociations>
        <Items>
            <LambdaFunctionAssociation>
                <EventType>string</EventType>
                <IncludeBody>boolean</IncludeBody>
                <LambdaFunctionARN>string</LambdaFunctionARN>
            </LambdaFunctionAssociation>
        </Items>
        <Quantity>integer</Quantity>
    </LambdaFunctionAssociations>
    <MaxTTL>long</MaxTTL>
    <MinTTL>long</MinTTL>
    <SmoothStreaming>boolean</SmoothStreaming>
    <TargetOriginId>string</TargetOriginId>
    <TrustedSigners>
        <Enabled>boolean</Enabled>
        <Items>
            <AwsAccountNumber>string</AwsAccountNumber>
        </Items>
            <Quantity>integer</Quantity>
        </TrustedSigners>
        <ViewerProtocolPolicy>string</ViewerProtocolPolicy>
    </DefaultCacheBehavior>
    <DefaultRootObject>string</DefaultRootObject>
    <Enabled>boolean</Enabled>
    <HttpVersion>string</HttpVersion>
    <IsIPV6Enabled>boolean</IsIPV6Enabled>
    <Logging>
        <Bucket>string</Bucket>
        <Enabled>boolean</Enabled>
        <IncludeCookies>boolean</IncludeCookies>
        <Prefix>string</Prefix>
    </Logging>
    <OriginGroups>
        <Items>

```

```
<OriginGroup>
  <FailoverCriteria>
    <StatusCodes>
      <Items>
        <StatusCode>integer</StatusCode>
      </Items>
      <Quantity>integer</Quantity>
    </StatusCodes>
  </FailoverCriteria>
  <Id>string</Id>
  <Members>
    <Items>
      <OriginGroupMember>
        <OriginId>string</OriginId>
      </OriginGroupMember>
    </Items>
    <Quantity>integer</Quantity>
  </Members>
  </OriginGroup>
</Items>
<Quantity>integer</Quantity>
</OriginGroups>
<Origins>
  <Items>
    <Origin>
      <CustomHeaders>
        <Items>
          <OriginCustomHeader>
            <HeaderName>string</HeaderName>
            <HeaderValue>string</HeaderValue>
          </OriginCustomHeader>
        </Items>
        <Quantity>integer</Quantity>
      </CustomHeaders>
      <CustomOriginConfig>
        <HTTPPort>integer</HTTPPort>
        <HTTPSPort>integer</HTTPSPort>
        <OriginKeepaliveTimeout>integer</OriginKeepaliveTimeout>
        <OriginProtocolPolicy>string</OriginProtocolPolicy>
        <OriginReadTimeout>integer</OriginReadTimeout>
        <OriginSslProtocols>
          <Items>
            <SslProtocol>string</SslProtocol>
          </Items>
          <Quantity>integer</Quantity>
        </OriginSslProtocols>
      </CustomOriginConfig>
      <DomainName>string</DomainName>
      <Id>string</Id>
      <OriginPath>string</OriginPath>
      <S3OriginConfig>
        <OriginAccessIdentity>string</OriginAccessIdentity>
      </S3OriginConfig>
    </Origin>
  </Items>
  <Quantity>integer</Quantity>
</Origins>
<PriceClass>string</PriceClass>
<Restrictions>
  <GeoRestriction>
    <Items>
      <Location>string</Location>
    </Items>
    <Quantity>integer</Quantity>
    <RestrictionType>string</RestrictionType>
  </GeoRestriction>
```

```
</Restrictions>
<ViewerCertificate>
  <ACMCertificateArn>string</ACMCertificateArn>
  <Certificate>string</Certificate>
  <CertificateSource>string</CertificateSource>
  <CloudFrontDefaultCertificate>boolean</CloudFrontDefaultCertificate>
  <IAMCertificateId>string</IAMCertificateId>
  <MinimumProtocolVersion>string</MinimumProtocolVersion>
  <SSLSupportMethod>string</SSLSupportMethod>
</ViewerCertificate>
<WebACLId>string</WebACLId>
</DistributionConfig>
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in XML format by the service.

### [DistributionConfig \(p. 89\)](#)

Root level tag for the DistributionConfig parameters.

Required: Yes

### [Aliases \(p. 89\)](#)

A complex type that contains information about CNAMEs (alternate domain names), if any, for this distribution.

Type: [Aliases \(p. 199\)](#) object

### [CacheBehaviors \(p. 89\)](#)

A complex type that contains zero or more CacheBehavior elements.

Type: [CacheBehaviors \(p. 207\)](#) object

### [CallerReference \(p. 89\)](#)

A unique value (for example, a date-time stamp) that ensures that the request can't be replayed.

If the value of CallerReference is new (regardless of the content of the DistributionConfig object), CloudFront creates a new distribution.

If CallerReference is a value that you already sent in a previous request to create a distribution, CloudFront returns a DistributionAlreadyExists error.

Type: String

### [Comment \(p. 89\)](#)

Any comments you want to include about the distribution.

If you don't want to specify a comment, include an empty Comment element.

To delete an existing comment, update the distribution configuration and include an empty Comment element.

To add or change a comment, update the distribution configuration and specify the new comment.

Type: String

### [CustomErrorResponses \(p. 89\)](#)

A complex type that controls the following:

- Whether CloudFront replaces HTTP status codes in the 4xx and 5xx range with custom error messages before returning the response to the viewer.
- How long CloudFront caches HTTP status codes in the 4xx and 5xx range.

For more information about custom error pages, see [Customizing Error Responses](#) in the *Amazon CloudFront Developer Guide*.

Type: [CustomErrorResponses \(p. 221\)](#) object

### [DefaultCacheBehavior \(p. 89\)](#)

A complex type that describes the default cache behavior if you don't specify a `CacheBehavior` element or if files don't match any of the values of `PathPattern` in `CacheBehavior` elements. You must create exactly one default cache behavior.

Type: [DefaultCacheBehavior \(p. 225\)](#) object

### [DefaultRootObject \(p. 89\)](#)

The object that you want CloudFront to request from your origin (for example, `index.html`) when a viewer requests the root URL for your distribution (`http://www.example.com`) instead of an object in your distribution (`http://www.example.com/product-description.html`). Specifying a default root object avoids exposing the contents of your distribution.

Specify only the object name, for example, `index.html`. Don't add a / before the object name.

If you don't want to specify a default root object when you create a distribution, include an empty `DefaultRootObject` element.

To delete the default root object from an existing distribution, update the distribution configuration and include an empty `DefaultRootObject` element.

To replace the default root object, update the distribution configuration and specify the new object.

For more information about the default root object, see [Creating a Default Root Object](#) in the *Amazon CloudFront Developer Guide*.

Type: String

### [Enabled \(p. 89\)](#)

From this field, you can enable or disable the selected distribution.

Type: Boolean

### [HttpVersion \(p. 89\)](#)

(Optional) Specify the maximum HTTP version that you want viewers to use to communicate with CloudFront. The default value for new web distributions is `http2`. Viewers that don't support `HTTP/2` automatically use an earlier HTTP version.

For viewers and CloudFront to use `HTTP/2`, viewers must support TLS 1.2 or later, and must support Server Name Identification (SNI).

In general, configuring CloudFront to communicate with viewers using `HTTP/2` reduces latency. You can improve performance by optimizing for `HTTP/2`. For more information, do an Internet search for "http/2 optimization."

Type: String

Valid Values: `http1.1` | `http2`

### [IsIPV6Enabled \(p. 89\)](#)

If you want CloudFront to respond to IPv6 DNS requests with an IPv6 address for your distribution, specify `true`. If you specify `false`, CloudFront responds to IPv6 DNS requests with the DNS response code `NOERROR` and with no IP addresses. This allows viewers to submit a second request, for an IPv4 address for your distribution.

In general, you should enable IPv6 if you have users on IPv6 networks who want to access your content. However, if you're using signed URLs or signed cookies to restrict access to your content, and if you're using a custom policy that includes the `IpAddress` parameter to restrict the IP addresses that can access your content, don't enable IPv6. If you want to restrict access to some content by IP address and not restrict access to other content (or restrict access but not by IP address), you can create two distributions. For more information, see [Creating a Signed URL Using a Custom Policy](#) in the *Amazon CloudFront Developer Guide*.

If you're using an Amazon Route 53 alias resource record set to route traffic to your CloudFront distribution, you need to create a second alias resource record set when both of the following are true:

- You enable IPv6 for the distribution
- You're using alternate domain names in the URLs for your objects

For more information, see [Routing Traffic to an Amazon CloudFront Web Distribution by Using Your Domain Name](#) in the *Amazon Route 53 Developer Guide*.

If you created a CNAME resource record set, either with Amazon Route 53 or with another DNS service, you don't need to make any changes. A CNAME record will route traffic to your distribution regardless of the IP address format of the viewer request.

Type: Boolean

### [Logging \(p. 89\)](#)

A complex type that controls whether access logs are written for the distribution.

For more information about logging, see [Access Logs](#) in the *Amazon CloudFront Developer Guide*.

Type: [LoggingConfig \(p. 267\)](#) object

### [OriginGroups \(p. 89\)](#)

A complex type that contains information about origin groups for this distribution.

Type: [OriginGroups \(p. 276\)](#) object

### [Origins \(p. 89\)](#)

A complex type that contains information about origins for this distribution.

Type: [Origins \(p. 277\)](#) object

### [PriceClass \(p. 89\)](#)

The price class that corresponds with the maximum price that you want to pay for CloudFront service. If you specify `PriceClass_All`, CloudFront responds to requests for your objects from all CloudFront edge locations.

If you specify a price class other than `PriceClass_All`, CloudFront serves your objects from the CloudFront edge location that has the lowest latency among the edge locations in your price class. Viewers who are in or near regions that are excluded from your specified price class may encounter slower performance.

For more information about price classes, see [Choosing the Price Class for a CloudFront Distribution](#) in the *Amazon CloudFront Developer Guide*. For information about CloudFront pricing, including how

price classes (such as Price Class 100) map to CloudFront regions, see [Amazon CloudFront Pricing](#). For price class information, scroll down to see the table at the bottom of the page.

Type: String

Valid Values: `PriceClass_100` | `PriceClass_200` | `PriceClass_All`

#### [Restrictions \(p. 89\)](#)

A complex type that identifies ways in which you want to restrict distribution of your content.

Type: [Restrictions \(p. 288\)](#) object

#### [ViewerCertificate \(p. 89\)](#)

A complex type that specifies whether you want viewers to use HTTP or HTTPS to request your objects, whether you're using an alternate domain name with HTTPS, and if so, if you're using AWS Certificate Manager (ACM) or a third-party certificate authority.

Type: [ViewerCertificate \(p. 307\)](#) object

#### [WebACLId \(p. 89\)](#)

A unique identifier that specifies the AWS WAF web ACL, if any, to associate with this distribution.

AWS WAF is a web application firewall that lets you monitor the HTTP and HTTPS requests that are forwarded to CloudFront, and lets you control access to your content. Based on conditions that you specify, such as the IP addresses that requests originate from or the values of query strings, CloudFront responds to requests either with the requested content or with an HTTP 403 status code (Forbidden). You can also configure CloudFront to return a custom error page when a request is blocked. For more information about AWS WAF, see the [AWS WAF Developer Guide](#).

Type: String

## Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 312\)](#).

### **AccessDenied**

Access denied.

HTTP Status Code: 403

### **NoSuchDistribution**

The specified distribution does not exist.

HTTP Status Code: 404

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java](#)

- [AWS SDK for JavaScript](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V2](#)

# GetFieldLevelEncryption

Get the field-level encryption configuration information.

## Request Syntax

```
GET /2019-03-26/field-level-encryption/Id HTTP/1.1
```

## URI Request Parameters

The request requires the following URI parameters.

### **Id** (p. 98)

Request the ID for the field-level encryption configuration information.

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
<?xml version="1.0" encoding="UTF-8"?>
<FieldLevelEncryption>
  <FieldLevelEncryptionConfig>
    <CallerReference>string</CallerReference>
    <Comment>string</Comment>
    <ContentTypeProfileConfig>
      <ContentTypeProfiles>
        <Items>
          <ContentTypeProfile>
            <ContentType>string</ContentType>
            <Format>string</Format>
            <ProfileId>string</ProfileId>
          </ContentTypeProfile>
        </Items>
        <Quantity>integer</Quantity>
      </ContentTypeProfiles>
      <ForwardWhenContentTypeIsUnknown>boolean</ForwardWhenContentTypeIsUnknown>
    </ContentTypeProfileConfig>
    <QueryArgProfileConfig>
      <ForwardWhenQueryArgProfileIsUnknown>boolean</ForwardWhenQueryArgProfileIsUnknown>
    <QueryArgProfiles>
      <Items>
        <QueryArgProfile>
          <ProfileId>string</ProfileId>
          <QueryArg>string</QueryArg>
        </QueryArgProfile>
      </Items>
      <Quantity>integer</Quantity>
    </QueryArgProfiles>
  </QueryArgProfileConfig>
</FieldLevelEncryptionConfig>
<Id>string</Id>
<LastModifiedTime>timestamp</LastModifiedTime>
```

```
</FieldLevelEncryption>
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in XML format by the service.

### [FieldLevelEncryption \(p. 98\)](#)

Root level tag for the FieldLevelEncryption parameters.

Required: Yes

### [FieldLevelEncryptionConfig \(p. 98\)](#)

A complex data type that includes the profile configurations specified for field-level encryption.

Type: [FieldLevelEncryptionConfig \(p. 244\)](#) object

### [Id \(p. 98\)](#)

The configuration ID for a field-level encryption configuration which includes a set of profiles that specify certain selected data fields to be encrypted by specific public keys.

Type: String

### [LastModifiedTime \(p. 98\)](#)

The last time the field-level encryption configuration was changed.

Type: Timestamp

## Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 312\)](#).

### **AccessDenied**

Access denied.

HTTP Status Code: 403

### **NoSuchFieldLevelEncryptionConfig**

The specified configuration for field-level encryption doesn't exist.

HTTP Status Code: 404

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java](#)

- [AWS SDK for JavaScript](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V2](#)

# GetFieldLevelEncryptionConfig

Get the field-level encryption configuration information.

## Request Syntax

```
GET /2019-03-26/field-level-encryption/Id/config HTTP/1.1
```

## URI Request Parameters

The request requires the following URI parameters.

### **Id** (p. 101)

Request the ID for the field-level encryption configuration information.

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
<?xml version="1.0" encoding="UTF-8"?>
<FieldLevelEncryptionConfig>
  <CallerReference>string</CallerReference>
  <Comment>string</Comment>
  <ContentTypeProfileConfig>
    <ContentTypeProfiles>
      <Items>
        <ContentTypeProfile>
          <ContentType>string</ContentType>
          <Format>string</Format>
          <ProfileId>string</ProfileId>
        </ContentTypeProfile>
      </Items>
      <Quantity>integer</Quantity>
    </ContentTypeProfiles>
    <ForwardWhenContentTypeIsUnknown>boolean</ForwardWhenContentTypeIsUnknown>
  </ContentTypeProfileConfig>
  <QueryArgProfileConfig>
    <ForwardWhenQueryArgProfileIsUnknown>boolean</ForwardWhenQueryArgProfileIsUnknown>
  <QueryArgProfiles>
    <Items>
      <QueryArgProfile>
        <ProfileId>string</ProfileId>
        <QueryArg>string</QueryArg>
      </QueryArgProfile>
    </Items>
    <Quantity>integer</Quantity>
  </QueryArgProfiles>
</QueryArgProfileConfig>
</FieldLevelEncryptionConfig>
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in XML format by the service.

### [FieldLevelEncryptionConfig \(p. 101\)](#)

Root level tag for the FieldLevelEncryptionConfig parameters.

Required: Yes

### [CallerReference \(p. 101\)](#)

A unique number that ensures the request can't be replayed.

Type: String

### [Comment \(p. 101\)](#)

An optional comment about the configuration.

Type: String

### [ContentTypeProfileConfig \(p. 101\)](#)

A complex data type that specifies when to forward content if a content type isn't recognized and profiles to use as by default in a request if a query argument doesn't specify a profile to use.

Type: [ContentTypeProfileConfig \(p. 215\)](#) object

### [QueryArgProfileConfig \(p. 101\)](#)

A complex data type that specifies when to forward content if a profile isn't found and the profile that can be provided as a query argument in a request.

Type: [QueryArgProfileConfig \(p. 285\)](#) object

## Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 312\)](#).

### **AccessDenied**

Access denied.

HTTP Status Code: 403

### **NoSuchFieldLevelEncryptionConfig**

The specified configuration for field-level encryption doesn't exist.

HTTP Status Code: 404

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java](#)
- [AWS SDK for JavaScript](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V2](#)

# GetFieldLevelEncryptionProfile

Get the field-level encryption profile information.

## Request Syntax

```
GET /2019-03-26/field-level-encryption-profile/Id HTTP/1.1
```

## URI Request Parameters

The request requires the following URI parameters.

### **Id** (p. 104)

Get the ID for the field-level encryption profile information.

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
<?xml version="1.0" encoding="UTF-8"?>
<FieldLevelEncryptionProfile>
  <FieldLevelEncryptionProfileConfig>
    <CallerReference>string</CallerReference>
    <Comment>string</Comment>
    <EncryptionEntities>
      <Items>
        <EncryptionEntity>
          <FieldPatterns>
            <Items>
              <FieldPattern>string</FieldPattern>
            </Items>
            <Quantity>integer</Quantity>
          </FieldPatterns>
          <ProviderId>string</ProviderId>
          <PublicKeyId>string</PublicKeyId>
        </EncryptionEntity>
      </Items>
      <Quantity>integer</Quantity>
    </EncryptionEntities>
    <Name>string</Name>
  </FieldLevelEncryptionProfileConfig>
  <Id>string</Id>
  <LastModifiedTime>timestamp</LastModifiedTime>
</FieldLevelEncryptionProfile>
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in XML format by the service.

### [FieldLevelEncryptionProfile \(p. 104\)](#)

Root level tag for the FieldLevelEncryptionProfile parameters.

Required: Yes

### [FieldLevelEncryptionProfileConfig \(p. 104\)](#)

A complex data type that includes the profile name and the encryption entities for the field-level encryption profile.

Type: [FieldLevelEncryptionProfileConfig \(p. 247\)](#) object

### [Id \(p. 104\)](#)

The ID for a field-level encryption profile configuration which includes a set of profiles that specify certain selected data fields to be encrypted by specific public keys.

Type: String

### [LastModifiedTime \(p. 104\)](#)

The last time the field-level encryption profile was updated.

Type: Timestamp

## Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 312\)](#).

### **AccessDenied**

Access denied.

HTTP Status Code: 403

### **NoSuchFieldLevelEncryptionProfile**

The specified profile for field-level encryption doesn't exist.

HTTP Status Code: 404

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java](#)
- [AWS SDK for JavaScript](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V2](#)

# GetFieldLevelEncryptionProfileConfig

Get the field-level encryption profile configuration information.

## Request Syntax

```
GET /2019-03-26/field-level-encryption-profile/Id/config HTTP/1.1
```

## URI Request Parameters

The request requires the following URI parameters.

### **Id** (p. 106)

Get the ID for the field-level encryption profile configuration information.

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
<?xml version="1.0" encoding="UTF-8"?>
<FieldLevelEncryptionProfileConfig>
  <CallerReference>string</CallerReference>
  <Comment>string</Comment>
  <EncryptionEntities>
    <Items>
      <EncryptionEntity>
        <FieldPatterns>
          <Items>
            <FieldPattern>string</FieldPattern>
          </Items>
          <Quantity>integer</Quantity>
        </FieldPatterns>
        <ProviderId>string</ProviderId>
        <PublicKeyId>string</PublicKeyId>
      </EncryptionEntity>
    </Items>
    <Quantity>integer</Quantity>
  </EncryptionEntities>
  <Name>string</Name>
</FieldLevelEncryptionProfileConfig>
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in XML format by the service.

### **FieldLevelEncryptionProfileConfig** (p. 106)

Root level tag for the FieldLevelEncryptionProfileConfig parameters.

Required: Yes

#### [CallerReference \(p. 106\)](#)

A unique number that ensures that the request can't be replayed.

Type: String

#### [Comment \(p. 106\)](#)

An optional comment for the field-level encryption profile.

Type: String

#### [EncryptionEntities \(p. 106\)](#)

A complex data type of encryption entities for the field-level encryption profile that include the public key ID, provider, and field patterns for specifying which fields to encrypt with this key.

Type: [EncryptionEntities \(p. 241\)](#) object

#### [Name \(p. 106\)](#)

Profile name for the field-level encryption profile.

Type: String

## Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 312\)](#).

### **AccessDenied**

Access denied.

HTTP Status Code: 403

### **NoSuchFieldLevelEncryptionProfile**

The specified profile for field-level encryption doesn't exist.

HTTP Status Code: 404

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java](#)
- [AWS SDK for JavaScript](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V2](#)

# GetInvalidation

Get the information about an invalidation.

## Request Syntax

```
GET /2019-03-26/distribution/DistributionId/invalidation/Id HTTP/1.1
```

## URI Request Parameters

The request requires the following URI parameters.

### **DistributionId** (p. 108)

The distribution's ID.

### **Id** (p. 108)

The identifier for the invalidation request, for example, `IDFDVBD632BHDS5`.

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
<?xml version="1.0" encoding="UTF-8"?>
<Invalidation>
  <CreateTime>timestamp</CreateTime>
  <Id>string</Id>
  <InvalidationBatch>
    <CallerReference>string</CallerReference>
    <Paths>
      <Items>
        <Path>string</Path>
      </Items>
      <Quantity>integer</Quantity>
    </Paths>
  </InvalidationBatch>
  <Status>string</Status>
</Invalidation>
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in XML format by the service.

### **Invalidation** (p. 108)

Root level tag for the Invalidation parameters.

Required: Yes

### [CreateTime \(p. 108\)](#)

The date and time the invalidation request was first made.

Type: Timestamp

### [Id \(p. 108\)](#)

The identifier for the invalidation request. For example: IDFDVBD632BHDS5.

Type: String

### [InvalidationBatch \(p. 108\)](#)

The current invalidation information for the batch request.

Type: [InvalidationBatch \(p. 259\)](#) object

### [Status \(p. 108\)](#)

The status of the invalidation request. When the invalidation batch is finished, the status is Completed.

Type: String

## Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 312\)](#).

### **AccessDenied**

Access denied.

HTTP Status Code: 403

### **NoSuchDistribution**

The specified distribution does not exist.

HTTP Status Code: 404

### **NoSuchInvalidation**

The specified invalidation does not exist.

HTTP Status Code: 404

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java](#)
- [AWS SDK for JavaScript](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)

- [AWS SDK for Ruby V2](#)

# GetPublicKey

Get the public key information.

## Request Syntax

```
GET /2019-03-26/public-key/Id HTTP/1.1
```

## URI Request Parameters

The request requires the following URI parameters.

### **Id** (p. 111)

Request the ID for the public key.

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
<?xml version="1.0" encoding="UTF-8"?>
<PublicKey>
  <CreatedTime>timestamp</CreatedTime>
  <Id>string</Id>
  <PublicKeyConfig>
    <CallerReference>string</CallerReference>
    <Comment>string</Comment>
    <EncodedKey>string</EncodedKey>
    <Name>string</Name>
  </PublicKeyConfig>
</PublicKey>
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in XML format by the service.

### **PublicKey** (p. 111)

Root level tag for the PublicKey parameters.

Required: Yes

### **CreatedTime** (p. 111)

A time you added a public key to CloudFront.

Type: Timestamp

### **Id** (p. 111)

A unique ID assigned to a public key you've added to CloudFront.

Type: String

### [PublicKeyConfig \(p. 111\)](#)

A complex data type for a public key you add to CloudFront to use with features like field-level encryption.

Type: [PublicKeyConfig \(p. 281\)](#) object

## Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 312\)](#).

### **AccessDenied**

Access denied.

HTTP Status Code: 403

### **NoSuchPublicKey**

The specified public key doesn't exist.

HTTP Status Code: 404

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java](#)
- [AWS SDK for JavaScript](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V2](#)

# GetPublicKeyConfig

Return public key configuration information

## Request Syntax

```
GET /2019-03-26/public-key/Id/config HTTP/1.1
```

## URI Request Parameters

The request requires the following URI parameters.

### **Id** (p. 113)

Request the ID for the public key configuration.

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
<?xml version="1.0" encoding="UTF-8"?>
<PublicKeyConfig>
    <CallerReference>string</CallerReference>
    <Comment>string</Comment>
    <EncodedKey>string</EncodedKey>
    <Name>string</Name>
</PublicKeyConfig>
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in XML format by the service.

### **PublicKeyConfig** (p. 113)

Root level tag for the PublicKeyConfig parameters.

Required: Yes

### **CallerReference** (p. 113)

A unique number that ensures that the request can't be replayed.

Type: String

### **Comment** (p. 113)

An optional comment about a public key.

Type: String

### [EncodedKey \(p. 113\)](#)

The encoded public key that you want to add to CloudFront to use with features like field-level encryption.

Type: String

### [Name \(p. 113\)](#)

The name for a public key you add to CloudFront to use with features like field-level encryption.

Type: String

## Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 312\)](#).

### **AccessDenied**

Access denied.

HTTP Status Code: 403

### **NoSuchPublicKey**

The specified public key doesn't exist.

HTTP Status Code: 404

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java](#)
- [AWS SDK for JavaScript](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V2](#)

# GetStreamingDistribution

Gets information about a specified RTMP distribution, including the distribution configuration.

## Request Syntax

```
GET /2019-03-26/streaming-distribution/Id HTTP/1.1
```

## URI Request Parameters

The request requires the following URI parameters.

### **Id** (p. 115)

The streaming distribution's ID.

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
<?xml version="1.0" encoding="UTF-8"?>
<StreamingDistribution>
  <ActiveTrustedSigners>
    <Enabled>boolean</Enabled>
    <Items>
      <Signer>
        <AwsAccountNumber>string</AwsAccountNumber>
        <KeyPairIds>
          <Items>
            <KeyId>string</KeyId>
          </Items>
          <Quantity>integer</Quantity>
        </KeyPairIds>
      </Signer>
    </Items>
    <Quantity>integer</Quantity>
  </ActiveTrustedSigners>
  <ARN>string</ARN>
  <DomainName>string</DomainName>
  <Id>string</Id>
  <LastModifiedTime>timestamp</LastModifiedTime>
  <Status>string</Status>
  <StreamingDistributionConfig>
    <Aliases>
      <Items>
        <CNAME>string</CNAME>
      </Items>
      <Quantity>integer</Quantity>
    </Aliases>
    <CallerReference>string</CallerReference>
    <Comment>string</Comment>
    <Enabled>boolean</Enabled>
    <Logging>
      <Bucket>string</Bucket>
```

```
<Enabled>boolean</Enabled>
<Prefix>string</Prefix>
</Logging>
<PriceClass>string</PriceClass>
<S3Origin>
  <DomainName>string</DomainName>
  <OriginAccessIdentity>string</OriginAccessIdentity>
</S3Origin>
<TrustedSigners>
  <Enabled>boolean</Enabled>
  <Items>
    <AwsAccountNumber>string</AwsAccountNumber>
  </Items>
  <Quantity>integer</Quantity>
</TrustedSigners>
</StreamingDistributionConfig>
</StreamingDistribution>
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in XML format by the service.

### **StreamingDistribution (p. 115)**

Root level tag for the StreamingDistribution parameters.

Required: Yes

#### **ActiveTrustedSigners (p. 115)**

A complex type that lists the AWS accounts, if any, that you included in the TrustedSigners complex type for this distribution. These are the accounts that you want to allow to create signed URLs for private content.

The Signer complex type lists the AWS account number of the trusted signer or self if the signer is the AWS account that created the distribution. The Signer element also includes the IDs of any active CloudFront key pairs that are associated with the trusted signer's AWS account. If no KeyPairId element appears for a Signer, that signer can't create signed URLs.

For more information, see [Serving Private Content through CloudFront](#) in the *Amazon CloudFront Developer Guide*.

Type: [ActiveTrustedSigners \(p. 198\)](#) object

#### **ARN (p. 115)**

The ARN (Amazon Resource Name) for the distribution. For example:

arn:aws:cloudfront::123456789012:distribution/EDFDVBD632BHDS5, where 123456789012 is your AWS account ID.

Type: String

#### **DomainName (p. 115)**

The domain name that corresponds to the streaming distribution, for example, s5c39gqb8ow64r.cloudfront.net.

Type: String

#### **Id (p. 115)**

The identifier for the RTMP distribution. For example: EGTXBD79EXAMPLE.

Type: String

[LastModifiedTime \(p. 115\)](#)

The date and time that the distribution was last modified.

Type: Timestamp

[Status \(p. 115\)](#)

The current status of the RTMP distribution. When the status is `Deployed`, the distribution's information is propagated to all CloudFront edge locations.

Type: String

[StreamingDistributionConfig \(p. 115\)](#)

The current configuration information for the RTMP distribution.

Type: [StreamingDistributionConfig \(p. 295\)](#) object

## Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 312\)](#).

**AccessDenied**

Access denied.

HTTP Status Code: 403

**NoSuchStreamingDistribution**

The specified streaming distribution does not exist.

HTTP Status Code: 404

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java](#)
- [AWS SDK for JavaScript](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V2](#)

# GetStreamingDistributionConfig

Get the configuration information about a streaming distribution.

## Request Syntax

```
GET /2019-03-26/streaming-distribution/Id/config HTTP/1.1
```

## URI Request Parameters

The request requires the following URI parameters.

### **Id** (p. 118)

The streaming distribution's ID.

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
<?xml version="1.0" encoding="UTF-8"?>
<StreamingDistributionConfig>
  <Aliases>
    <Items>
      <CNAME>string</CNAME>
    </Items>
    <Quantity>integer</Quantity>
  </Aliases>
  <CallerReference>string</CallerReference>
  <Comment>string</Comment>
  <Enabled>boolean</Enabled>
  <Logging>
    <Bucket>string</Bucket>
    <Enabled>boolean</Enabled>
    <Prefix>string</Prefix>
  </Logging>
  <PriceClass>string</PriceClass>
  <S3Origin>
    <DomainName>string</DomainName>
    <OriginAccessIdentity>string</OriginAccessIdentity>
  </S3Origin>
  <TrustedSigners>
    <Enabled>boolean</Enabled>
    <Items>
      <AwsAccountNumber>string</AwsAccountNumber>
    </Items>
    <Quantity>integer</Quantity>
  </TrustedSigners>
</StreamingDistributionConfig>
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in XML format by the service.

**[StreamingDistributionConfig \(p. 118\)](#)**

Root level tag for the StreamingDistributionConfig parameters.

Required: Yes

**[Aliases \(p. 118\)](#)**

A complex type that contains information about CNAMEs (alternate domain names), if any, for this streaming distribution.

Type: [Aliases \(p. 199\)](#) object

**[CallerReference \(p. 118\)](#)**

A unique value (for example, a date-time stamp) that ensures that the request can't be replayed.

If the value of CallerReference is new (regardless of the content of the StreamingDistributionConfig object), CloudFront creates a new distribution.

If CallerReference is a value that you already sent in a previous request to create a distribution, CloudFront returns a DistributionAlreadyExists error.

Type: String

**[Comment \(p. 118\)](#)**

Any comments you want to include about the streaming distribution.

Type: String

**[Enabled \(p. 118\)](#)**

Whether the streaming distribution is enabled to accept user requests for content.

Type: Boolean

**[Logging \(p. 118\)](#)**

A complex type that controls whether access logs are written for the streaming distribution.

Type: [StreamingLoggingConfig \(p. 302\)](#) object

**[PriceClass \(p. 118\)](#)**

A complex type that contains information about price class for this streaming distribution.

Type: String

Valid Values: PriceClass\_100 | PriceClass\_200 | PriceClass\_All

**[S3Origin \(p. 118\)](#)**

A complex type that contains information about the Amazon S3 bucket from which you want CloudFront to get your media files for distribution.

Type: [S3Origin \(p. 289\)](#) object

**[TrustedSigners \(p. 118\)](#)**

A complex type that specifies any AWS accounts that you want to permit to create signed URLs for private content. If you want the distribution to use signed URLs, include this element; if you want the distribution to use public URLs, remove this element. For more information, see [Serving Private Content through CloudFront](#) in the *Amazon CloudFront Developer Guide*.

Type: [TrustedSigners \(p. 306\)](#) object

## Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 312\)](#).

### AccessDenied

Access denied.

HTTP Status Code: 403

### NoSuchStreamingDistribution

The specified streaming distribution does not exist.

HTTP Status Code: 404

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java](#)
- [AWS SDK for JavaScript](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V2](#)

# ListCloudFrontOriginAccessIdentities

Lists origin access identities.

## Request Syntax

```
GET /2019-03-26/origin-access-identity/cloudfront?Marker=Marker&MaxItems=MaxItems HTTP/1.1
```

## URI Request Parameters

The request requires the following URI parameters.

### [Marker \(p. 121\)](#)

Use this when paginating results to indicate where to begin in your list of origin access identities. The results include identities in the list that occur after the marker. To get the next page of results, set the `Marker` to the value of the `NextMarker` from the current page's response (which is also the ID of the last identity on that page).

### [MaxItems \(p. 121\)](#)

The maximum number of origin access identities you want in the response body.

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
<?xml version="1.0" encoding="UTF-8"?>
<CloudFrontOriginAccessIdentityList>
  <IsTruncated>boolean</IsTruncated>
  <Items>
    <CloudFrontOriginAccessIdentitySummary>
      <Comment>string</Comment>
      <Id>string</Id>
      <S3CanonicalUserId>string</S3CanonicalUserId>
    </CloudFrontOriginAccessIdentitySummary>
  </Items>
  <Marker>string</Marker>
  <MaxItems>integer</MaxItems>
  <NextMarker>string</NextMarker>
  <Quantity>integer</Quantity>
</CloudFrontOriginAccessIdentityList>
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in XML format by the service.

### [CloudFrontOriginAccessIdentityList \(p. 121\)](#)

Root level tag for the CloudFrontOriginAccessIdentityList parameters.

Required: Yes

### [IsTruncated \(p. 121\)](#)

A flag that indicates whether more origin access identities remain to be listed. If your results were truncated, you can make a follow-up pagination request using the `Marker` request parameter to retrieve more items in the list.

Type: Boolean

### [Items \(p. 121\)](#)

A complex type that contains one `CloudFrontOriginAccessIdentitySummary` element for each origin access identity that was created by the current AWS account.

Type: Array of [CloudFrontOriginAccessIdentitySummary \(p. 213\)](#) objects

### [Marker \(p. 121\)](#)

Use this when paginating results to indicate where to begin in your list of origin access identities. The results include identities in the list that occur after the marker. To get the next page of results, set the `Marker` to the value of the `NextMarker` from the current page's response (which is also the ID of the last identity on that page).

Type: String

### [MaxItems \(p. 121\)](#)

The maximum number of origin access identities you want in the response body.

Type: Integer

### [NextMarker \(p. 121\)](#)

If `IsTruncated` is `true`, this element is present and contains the value you can use for the `Marker` request parameter to continue listing your origin access identities where they left off.

Type: String

### [Quantity \(p. 121\)](#)

The number of CloudFront origin access identities that were created by the current AWS account.

Type: Integer

## Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 312\)](#).

### **InvalidArgumentException**

The argument is invalid.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java](#)
- [AWS SDK for JavaScript](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V2](#)

# ListDistributions

List CloudFront distributions.

## Request Syntax

```
GET /2019-03-26/distribution?Marker=Marker&MaxItems=MaxItems HTTP/1.1
```

## URI Request Parameters

The request requires the following URI parameters.

### [Marker \(p. 124\)](#)

Use this when paginating results to indicate where to begin in your list of distributions. The results include distributions in the list that occur after the marker. To get the next page of results, set the `Marker` to the value of the `NextMarker` from the current page's response (which is also the ID of the last distribution on that page).

### [MaxItems \(p. 124\)](#)

The maximum number of distributions you want in the response body.

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
<?xml version="1.0" encoding="UTF-8"?>
<DistributionList>
  <IsTruncated>boolean</IsTruncated>
  <Items>
    <DistributionSummary>
      <Aliases>
        <Items>
          <CNAME>string</CNAME>
        </Items>
        <Quantity>integer</Quantity>
      </Aliases>
      <AliasICPRecords>
        <AliasICPRecordal>
          <CNAME>string</CNAME>
          <ICPRecordalStatus>string</ICPRecordalStatus>
        </AliasICPRecordal>
      </AliasICPRecords>
      <ARN>string</ARN>
      <CacheBehaviors>
        <Items>
          <CacheBehavior>
            <AllowedMethods>
              <CachedMethods>
                <Items>
                  <Method>string</Method>
                </Items>
              </CachedMethods>
            </AllowedMethods>
          </CacheBehavior>
        </Items>
      </CacheBehaviors>
    </DistributionSummary>
  </Items>
</DistributionList>
```

```
<Quantity>integer</Quantity>
</CachedMethods>
<Items>
    <Method>string</Method>
</Items>
<Quantity>integer</Quantity>
</AllowedMethods>
<Compress>boolean</Compress>
<DefaultTTL>long</DefaultTTL>
<FieldLevelEncryptionId>string</FieldLevelEncryptionId>
<ForwardedValues>
    <Cookies>
        <Forward>string</Forward>
        <WhitelistedNames>
            <Items>
                <Name>string</Name>
            </Items>
            <Quantity>integer</Quantity>
        </WhitelistedNames>
    </Cookies>
    <Headers>
        <Items>
            <Name>string</Name>
        </Items>
        <Quantity>integer</Quantity>
    </Headers>
    <QueryString>boolean</QueryString>
    <QueryStringCacheKeys>
        <Items>
            <Name>string</Name>
        </Items>
        <Quantity>integer</Quantity>
    </QueryStringCacheKeys>
</ForwardedValues>
<LambdaFunctionAssociations>
    <Items>
        <LambdaFunctionAssociation>
            <EventType>string</EventType>
            <IncludeBody>boolean</IncludeBody>
            <LambdaFunctionARN>string</LambdaFunctionARN>
        </LambdaFunctionAssociation>
    </Items>
    <Quantity>integer</Quantity>
</LambdaFunctionAssociations>
<MaxTTL>long</MaxTTL>
<MinTTL>long</MinTTL>
<PathPattern>string</PathPattern>
<SmoothStreaming>boolean</SmoothStreaming>
<TargetOriginId>string</TargetOriginId>
<TrustedSigners>
    <Enabled>boolean</Enabled>
    <Items>
        <AwsAccountNumber>string</AwsAccountNumber>
    </Items>
    <Quantity>integer</Quantity>
</TrustedSigners>
<ViewerProtocolPolicy>string</ViewerProtocolPolicy>
</CacheBehavior>
</Items>
<Quantity>integer</Quantity>
</CacheBehaviors>
<Comment>string</Comment>
<CustomErrorResponsees>
    <Items>
        <CustomErrorResponse>
            <ErrorCachingMinTTL>long</ErrorCachingMinTTL>
```

```
<ErrorCode>integer</ErrorCode>
<ResponseCode>string</ResponseCode>
<ResponsePagePath>string</ResponsePagePath>
</CustomErrorResponse>
</Items>
<Quantity>integer</Quantity>
</CustomErrorResponses>
<DefaultCacheBehavior>
<AllowedMethods>
<CachedMethods>
<Items>
<Method>string</Method>
</Items>
<Quantity>integer</Quantity>
</CachedMethods>
<Items>
<Method>string</Method>
</Items>
<Quantity>integer</Quantity>
</AllowedMethods>
<Compress>boolean</Compress>
<DefaultTTL>long</DefaultTTL>
<FieldLevelEncryptionId>string</FieldLevelEncryptionId>
<ForwardedValues>
<Cookies>
<Forward>string</Forward>
<WhitelistedNames>
<Items>
<Name>string</Name>
</Items>
<Quantity>integer</Quantity>
</WhitelistedNames>
</Cookies>
<Headers>
<Items>
<Name>string</Name>
</Items>
<Quantity>integer</Quantity>
</Headers>
<QueryString>boolean</QueryString>
<QueryStringCacheKeys>
<Items>
<Name>string</Name>
</Items>
<Quantity>integer</Quantity>
</QueryStringCacheKeys>
</ForwardedValues>
<LambdaFunctionAssociations>
<Items>
<LambdaFunctionAssociation>
<EventType>string</EventType>
<IncludeBody>boolean</IncludeBody>
<LambdaFunctionARN>string</LambdaFunctionARN>
</LambdaFunctionAssociation>
</Items>
<Quantity>integer</Quantity>
</LambdaFunctionAssociations>
<MaxTTL>long</MaxTTL>
<MinTTL>long</MinTTL>
<SmoothStreaming>boolean</SmoothStreaming>
<TargetOriginId>string</TargetOriginId>
<TrustedSigners>
<Enabled>boolean</Enabled>
<Items>
<AwsAccountNumber>string</AwsAccountNumber>
</Items>
```

```
<Quantity>integer</Quantity>
</TrustedSigners>
<ViewerProtocolPolicy>string</ViewerProtocolPolicy>
</DefaultCacheBehavior>
<DomainName>string</DomainName>
<Enabled>boolean</Enabled>
<HttpVersion>string</HttpVersion>
<Id>string</Id>
<IsIPV6Enabled>boolean</IsIPV6Enabled>
<LastModifiedTime>timestamp</LastModifiedTime>
<OriginGroups>
  <Items>
    <OriginGroup>
      <FailoverCriteria>
        <StatusCodes>
          <Items>
            <StatusCode>integer</StatusCode>
          </Items>
          <Quantity>integer</Quantity>
        </StatusCodes>
      </FailoverCriteria>
      <Id>string</Id>
      <Members>
        <Items>
          <OriginGroupMember>
            <OriginId>string</OriginId>
          </OriginGroupMember>
        </Items>
        <Quantity>integer</Quantity>
      </Members>
    </OriginGroup>
  </Items>
  <Quantity>integer</Quantity>
</OriginGroups>
<Origins>
  <Items>
    <Origin>
      <CustomHeaders>
        <Items>
          <OriginCustomHeader>
            <HeaderName>string</HeaderName>
            <HeaderValue>string</HeaderValue>
          </OriginCustomHeader>
        </Items>
        <Quantity>integer</Quantity>
      </CustomHeaders>
      <CustomOriginConfig>
        <HTTPPort>integer</HTTPPort>
        <HTTPSPort>integer</HTTPSPort>
        <OriginKeepaliveTimeout>integer</OriginKeepaliveTimeout>
        <OriginProtocolPolicy>string</OriginProtocolPolicy>
        <OriginReadTimeout>integer</OriginReadTimeout>
        <OriginSslProtocols>
          <Items>
            <SslProtocol>string</SslProtocol>
          </Items>
          <Quantity>integer</Quantity>
        </OriginSslProtocols>
      </CustomOriginConfig>
      <DomainName>string</DomainName>
      <Id>string</Id>
      <OriginPath>string</OriginPath>
      <S3OriginConfig>
        <OriginAccessIdentity>string</OriginAccessIdentity>
      </S3OriginConfig>
    </Origin>
  </Items>
</Origins>
```

```
</Items>
<Quantity>integer</Quantity>
</Origins>
<PriceClass>string</PriceClass>
<Restrictions>
  <GeoRestriction>
    <Items>
      <Location>string</Location>
    </Items>
    <Quantity>integer</Quantity>
    <RestrictionType>string</RestrictionType>
  </GeoRestriction>
</Restrictions>
<Status>string</Status>
<ViewerCertificate>
  <ACMCertificateArn>string</ACMCertificateArn>
  <Certificate>string</Certificate>
  <CertificateSource>string</CertificateSource>
  <CloudFrontDefaultCertificate>boolean</CloudFrontDefaultCertificate>
  <IAMCertificateId>string</IAMCertificateId>
  <MinimumProtocolVersion>string</MinimumProtocolVersion>
  <SSLSupportMethod>string</SSLSupportMethod>
</ViewerCertificate>
<WebACLId>string</WebACLId>
</DistributionSummary>
</Items>
<Marker>string</Marker>
<MaxItems>integer</MaxItems>
<NextMarker>string</NextMarker>
<Quantity>integer</Quantity>
</DistributionList>
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in XML format by the service.

### [DistributionList \(p. 124\)](#)

Root level tag for the DistributionList parameters.

Required: Yes

### [IsTruncated \(p. 124\)](#)

A flag that indicates whether more distributions remain to be listed. If your results were truncated, you can make a follow-up pagination request using the `Marker` request parameter to retrieve more distributions in the list.

Type: Boolean

### [Items \(p. 124\)](#)

A complex type that contains one `DistributionSummary` element for each distribution that was created by the current AWS account.

Type: Array of [DistributionSummary \(p. 237\)](#) objects

### [Marker \(p. 124\)](#)

The value you provided for the `Marker` request parameter.

Type: String

### [MaxItems \(p. 124\)](#)

The value you provided for the `MaxItems` request parameter.

Type: Integer

### [NextMarker \(p. 124\)](#)

If `IsTruncated` is `true`, this element is present and contains the value you can use for the `Marker` request parameter to continue listing your distributions where they left off.

Type: String

### [Quantity \(p. 124\)](#)

The number of distributions that were created by the current AWS account.

Type: Integer

## Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 312\)](#).

### **InvalidArgumentException**

The argument is invalid.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java](#)
- [AWS SDK for JavaScript](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V2](#)

# ListDistributionsByWebACLId

List the distributions that are associated with a specified AWS WAF web ACL.

## Request Syntax

```
GET /2019-03-26/distributionsByWebACLId/WebACLId?Marker=Marker&MaxItems=MaxItems HTTP/1.1
```

## URI Request Parameters

The request requires the following URI parameters.

### [Marker \(p. 130\)](#)

Use `Marker` and `MaxItems` to control pagination of results. If you have more than `MaxItems` distributions that satisfy the request, the response includes a `NextMarker` element. To get the next page of results, submit another request. For the value of `Marker`, specify the value of `NextMarker` from the last response. (For the first request, omit `Marker`.)

### [MaxItems \(p. 130\)](#)

The maximum number of distributions that you want CloudFront to return in the response body. The maximum and default values are both 100.

### [WebACLId \(p. 130\)](#)

The ID of the AWS WAF web ACL that you want to list the associated distributions. If you specify "null" for the ID, the request returns a list of the distributions that aren't associated with a web ACL.

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
<?xml version="1.0" encoding="UTF-8"?>
<DistributionList>
  <IsTruncated>boolean</IsTruncated>
  <Items>
    <DistributionSummary>
      <Aliases>
        <Items>
          <CNAME>string</CNAME>
        </Items>
        <Quantity>integer</Quantity>
      </Aliases>
      <AliasICPRecords>
        <AliasICPRecordal>
          <CNAME>string</CNAME>
          <ICPRecordalStatus>string</ICPRecordalStatus>
        </AliasICPRecordal>
      </AliasICPRecords>
      <ARN>string</ARN>
      <CacheBehaviors>
        <Items>
```

```
<CacheBehavior>
  <AllowedMethods>
    <CachedMethods>
      <Items>
        <Method>string</Method>
      </Items>
      <Quantity>integer</Quantity>
    </CachedMethods>
    <Items>
      <Method>string</Method>
    </Items>
    <Quantity>integer</Quantity>
  </AllowedMethods>
  <Compress>boolean</Compress>
  <DefaultTTL>long</DefaultTTL>
  <FieldLevelEncryptionId>string</FieldLevelEncryptionId>
  <ForwardedValues>
    <Cookies>
      <Forward>string</Forward>
      <WhitelistedNames>
        <Items>
          <Name>string</Name>
        </Items>
        <Quantity>integer</Quantity>
      </WhitelistedNames>
    </Cookies>
    <Headers>
      <Items>
        <Name>string</Name>
      </Items>
      <Quantity>integer</Quantity>
    </Headers>
    <QueryString>boolean</QueryString>
    <QueryStringCacheKeys>
      <Items>
        <Name>string</Name>
      </Items>
      <Quantity>integer</Quantity>
    </QueryStringCacheKeys>
  </ForwardedValues>
  <LambdaFunctionAssociations>
    <Items>
      <LambdaFunctionAssociation>
        <EventType>string</EventType>
        <IncludeBody>boolean</IncludeBody>
        <LambdaFunctionARN>string</LambdaFunctionARN>
      </LambdaFunctionAssociation>
    </Items>
    <Quantity>integer</Quantity>
  </LambdaFunctionAssociations>
  <MaxTTL>long</MaxTTL>
  <MinTTL>long</MinTTL>
  <PathPattern>string</PathPattern>
  <SmoothStreaming>boolean</SmoothStreaming>
  <TargetOriginId>string</TargetOriginId>
  <TrustedSigners>
    <Enabled>boolean</Enabled>
    <Items>
      <AwsAccountNumber>string</AwsAccountNumber>
    </Items>
    <Quantity>integer</Quantity>
  </TrustedSigners>
  <ViewerProtocolPolicy>string</ViewerProtocolPolicy>
</CacheBehavior>
</Items>
<Quantity>integer</Quantity>
```

```
</CacheBehaviors>
<Comment>string</Comment>
<CustomErrorResponses>
  <Items>
    <CustomErrorResponse>
      <ErrorCachingMinTTL>long</ErrorCachingMinTTL>
      <ErrorCode>integer</ErrorCode>
      <ResponseCode>string</ResponseCode>
      <ResponsePagePath>string</ResponsePagePath>
    </CustomErrorResponse>
  </Items>
  <Quantity>integer</Quantity>
</CustomErrorResponses>
<DefaultCacheBehavior>
  <AllowedMethods>
    <CachedMethods>
      <Items>
        <Method>string</Method>
      </Items>
      <Quantity>integer</Quantity>
    </CachedMethods>
    <Items>
      <Method>string</Method>
    </Items>
    <Quantity>integer</Quantity>
  </AllowedMethods>
  <Compress>boolean</Compress>
  <DefaultTTL>long</DefaultTTL>
  <FieldLevelEncryptionId>string</FieldLevelEncryptionId>
  <ForwardedValues>
    <Cookies>
      <Forward>string</Forward>
    <WhitelistedNames>
      <Items>
        <Name>string</Name>
      </Items>
      <Quantity>integer</Quantity>
    </WhitelistedNames>
  </Cookies>
  <Headers>
    <Items>
      <Name>string</Name>
    </Items>
    <Quantity>integer</Quantity>
  </Headers>
  <QueryString>boolean</QueryString>
  <QueryStringCacheKeys>
    <Items>
      <Name>string</Name>
    </Items>
    <Quantity>integer</Quantity>
  </QueryStringCacheKeys>
  <ForwardedValues>
    <LambdaFunctionAssociations>
      <Items>
        <LambdaFunctionAssociation>
          <EventType>string</EventType>
          <IncludeBody>boolean</IncludeBody>
          <LambdaFunctionARN>string</LambdaFunctionARN>
        </LambdaFunctionAssociation>
      </Items>
      <Quantity>integer</Quantity>
    </LambdaFunctionAssociations>
  </ForwardedValues>
  <MaxTTL>long</MaxTTL>
  <MinTTL>long</MinTTL>
  <SmoothStreaming>boolean</SmoothStreaming>
```

```
<TargetOriginId>string</TargetOriginId>
<TrustedSigners>
  <Enabled>boolean</Enabled>
  <Items>
    <AwsAccountNumber>string</AwsAccountNumber>
  </Items>
  <Quantity>integer</Quantity>
</TrustedSigners>
<ViewerProtocolPolicy>string</ViewerProtocolPolicy>
</DefaultCacheBehavior>
<DomainName>string</DomainName>
<Enabled>boolean</Enabled>
<HttpVersion>string</HttpVersion>
<Id>string</Id>
<IsIPV6Enabled>boolean</IsIPV6Enabled>
<LastModifiedTime>timestampl</LastModifiedTime>
<OriginGroups>
  <Items>
    <OriginGroup>
      <FailoverCriteria>
        <StatusCodes>
          <Items>
            <StatusCode>integer</StatusCode>
          </Items>
          <Quantity>integer</Quantity>
        </StatusCodes>
      </FailoverCriteria>
      <Id>string</Id>
      <Members>
        <Items>
          <OriginGroupMember>
            <OriginId>string</OriginId>
          </OriginGroupMember>
        </Items>
        <Quantity>integer</Quantity>
      </Members>
    </OriginGroup>
  </Items>
  <Quantity>integer</Quantity>
</OriginGroups>
<Origins>
  <Items>
    <Origin>
      <CustomHeaders>
        <Items>
          <OriginCustomHeader>
            <HeaderName>string</HeaderName>
            <HeaderValue>string</HeaderValue>
          </OriginCustomHeader>
        </Items>
        <Quantity>integer</Quantity>
      </CustomHeaders>
      <CustomOriginConfig>
        <HTTPPort>integer</HTTPPort>
        <HTTPSPort>integer</HTTPSPort>
        <OriginKeepaliveTimeout>integer</OriginKeepaliveTimeout>
        <OriginProtocolPolicy>string</OriginProtocolPolicy>
        <OriginReadTimeout>integer</OriginReadTimeout>
        <OriginSslProtocols>
          <Items>
            <SslProtocol>string</SslProtocol>
          </Items>
          <Quantity>integer</Quantity>
        </OriginSslProtocols>
      </CustomOriginConfig>
    <DomainName>string</DomainName>
```

```

<Id>string</Id>
<OriginPath>string</OriginPath>
<S3OriginConfig>
    <OriginAccessIdentity>string</OriginAccessIdentity>
</S3OriginConfig>
</Origin>
</Items>
<Quantity>integer</Quantity>
</Origins>
<PriceClass>string</PriceClass>
<Restrictions>
    <GeoRestriction>
        <Items>
            <Location>string</Location>
        </Items>
        <Quantity>integer</Quantity>
        <RestrictionType>string</RestrictionType>
    </GeoRestriction>
</Restrictions>
<Status>string</Status>
<ViewerCertificate>
    <ACMCertificateArn>string</ACMCertificateArn>
    <Certificate>string</Certificate>
    <CertificateSource>string</CertificateSource>
    <CloudFrontDefaultCertificate>boolean</CloudFrontDefaultCertificate>
    <IAMCertificateId>string</IAMCertificateId>
    <MinimumProtocolVersion>string</MinimumProtocolVersion>
    <SSLSupportMethod>string</SSLSupportMethod>
</ViewerCertificate>
<WebACLId>string</WebACLId>
</DistributionSummary>
</Items>
<Marker>string</Marker>
<MaxItems>integer</MaxItems>
<NextMarker>string</NextMarker>
<Quantity>integer</Quantity>
</DistributionList>

```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in XML format by the service.

### [DistributionList \(p. 130\)](#)

Root level tag for the DistributionList parameters.

Required: Yes

### [IsTruncated \(p. 130\)](#)

A flag that indicates whether more distributions remain to be listed. If your results were truncated, you can make a follow-up pagination request using the `Marker` request parameter to retrieve more distributions in the list.

Type: Boolean

### [Items \(p. 130\)](#)

A complex type that contains one `DistributionSummary` element for each distribution that was created by the current AWS account.

Type: Array of [DistributionSummary \(p. 237\)](#) objects

### [Marker \(p. 130\)](#)

The value you provided for the `Marker` request parameter.

Type: String

### [MaxItems \(p. 130\)](#)

The value you provided for the `MaxItems` request parameter.

Type: Integer

### [NextMarker \(p. 130\)](#)

If `IsTruncated` is `true`, this element is present and contains the value you can use for the `Marker` request parameter to continue listing your distributions where they left off.

Type: String

### [Quantity \(p. 130\)](#)

The number of distributions that were created by the current AWS account.

Type: Integer

## Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 312\)](#).

### **InvalidArgumentException**

The argument is invalid.

HTTP Status Code: 400

### **InvalidWebACLId**

A web ACL id specified in the response body is not valid.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java](#)
- [AWS SDK for JavaScript](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V2](#)

# ListFieldLevelEncryptionConfigs

List all field-level encryption configurations that have been created in CloudFront for this account.

## Request Syntax

```
GET /2019-03-26/field-level-encryption?Marker=Marker&MaxItems=MaxItems HTTP/1.1
```

## URI Request Parameters

The request requires the following URI parameters.

### [Marker \(p. 136\)](#)

Use this when paginating results to indicate where to begin in your list of configurations. The results include configurations in the list that occur after the marker. To get the next page of results, set the Marker to the value of the NextMarker from the current page's response (which is also the ID of the last configuration on that page).

### [MaxItems \(p. 136\)](#)

The maximum number of field-level encryption configurations you want in the response body.

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
<?xml version="1.0" encoding="UTF-8"?>
<FieldLevelEncryptionList>
  <Items>
    <FieldLevelEncryptionSummary>
      <Comment>string</Comment>
      <ContentTypeProfileConfig>
        <ContentTypeProfiles>
          <Items>
            <ContentTypeProfile>
              <ContentType>string</ContentType>
              <Format>string</Format>
              <ProfileId>string</ProfileId>
            </ContentTypeProfile>
          </Items>
          <Quantity>integer</Quantity>
        </ContentTypeProfiles>
        <ForwardWhenContentTypeIsUnknown>boolean</ForwardWhenContentTypeIsUnknown>
      </ContentTypeProfileConfig>
      <Id>string</Id>
      <LastModifiedTime>timestamp</LastModifiedTime>
      <QueryArgProfileConfig>

      <ForwardWhenQueryArgProfileIsUnknown>boolean</ForwardWhenQueryArgProfileIsUnknown>
      <QueryArgProfiles>
        <Items>
          <QueryArgProfile>
```

```
<ProfileId>string</ProfileId>
  <QueryArg>string</QueryArg>
    </QueryArgProfile>
  </Items>
  <Quantity>integer</Quantity>
</QueryArgProfiles>
</QueryArgProfileConfig>
</FieldLevelEncryptionSummary>
</Items>
<MaxItems>integer</MaxItems>
<NextMarker>string</NextMarker>
<Quantity>integer</Quantity>
</FieldLevelEncryptionList>
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in XML format by the service.

### [FieldLevelEncryptionList \(p. 136\)](#)

Root level tag for the FieldLevelEncryptionList parameters.

Required: Yes

#### [Items \(p. 136\)](#)

An array of field-level encryption items.

Type: Array of [FieldLevelEncryptionSummary \(p. 250\)](#) objects

#### [MaxItems \(p. 136\)](#)

The maximum number of elements you want in the response body.

Type: Integer

#### [NextMarker \(p. 136\)](#)

If there are more elements to be listed, this element is present and contains the value that you can use for the `Marker` request parameter to continue listing your configurations where you left off.

Type: String

#### [Quantity \(p. 136\)](#)

The number of field-level encryption items.

Type: Integer

## Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 312\)](#).

### **InvalidArgumentException**

The argument is invalid.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java](#)
- [AWS SDK for JavaScript](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V2](#)

# ListFieldLevelEncryptionProfiles

Request a list of field-level encryption profiles that have been created in CloudFront for this account.

## Request Syntax

```
GET /2019-03-26/field-level-encryption-profile?Marker=Marker&MaxItems=MaxItems HTTP/1.1
```

## URI Request Parameters

The request requires the following URI parameters.

### Marker (p. 139)

Use this when paginating results to indicate where to begin in your list of profiles. The results include profiles in the list that occur after the marker. To get the next page of results, set the `Marker` to the value of the `NextMarker` from the current page's response (which is also the ID of the last profile on that page).

### MaxItems (p. 139)

The maximum number of field-level encryption profiles you want in the response body.

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
<?xml version="1.0" encoding="UTF-8"?>
<FieldLevelEncryptionProfileList>
  <Items>
    <FieldLevelEncryptionProfileSummary>
      <Comment>string</Comment>
      <EncryptionEntities>
        <Items>
          <EncryptionEntity>
            <FieldPatterns>
              <Items>
                <FieldPattern>string</FieldPattern>
              </Items>
              <Quantity>integer</Quantity>
            </FieldPatterns>
            <ProviderId>string</ProviderId>
            <PublicKeyId>string</PublicKeyId>
          </EncryptionEntity>
        </Items>
        <Quantity>integer</Quantity>
      </EncryptionEntities>
      <Id>string</Id>
      <LastModifiedTime>timestamp</LastModifiedTime>
      <Name>string</Name>
    </FieldLevelEncryptionProfileSummary>
  </Items>
  <MaxItems>integer</MaxItems>
```

```
<NextMarker>string</NextMarker>
<Quantity>integer</Quantity>
</FieldLevelEncryptionProfileList>
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in XML format by the service.

### [FieldLevelEncryptionProfileList \(p. 139\)](#)

Root level tag for the FieldLevelEncryptionProfileList parameters.

Required: Yes

### [Items \(p. 139\)](#)

The field-level encryption profile items.

Type: Array of [FieldLevelEncryptionProfileSummary \(p. 249\)](#) objects

### [MaxItems \(p. 139\)](#)

The maximum number of field-level encryption profiles you want in the response body.

Type: Integer

### [NextMarker \(p. 139\)](#)

If there are more elements to be listed, this element is present and contains the value that you can use for the `Marker` request parameter to continue listing your profiles where you left off.

Type: String

### [Quantity \(p. 139\)](#)

The number of field-level encryption profiles.

Type: Integer

## Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 312\)](#).

### **InvalidArgumentException**

The argument is invalid.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go](#)

- [AWS SDK for Java](#)
- [AWS SDK for JavaScript](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V2](#)

# ListInvalidations

Lists invalidation batches.

## Request Syntax

```
GET /2019-03-26/distribution/DistributionId/invalidation?Marker=Marker&MaxItems=MaxItems
HTTP/1.1
```

## URI Request Parameters

The request requires the following URI parameters.

### **DistributionId** (p. 142)

The distribution's ID.

### **Marker** (p. 142)

Use this parameter when paginating results to indicate where to begin in your list of invalidation batches. Because the results are returned in decreasing order from most recent to oldest, the most recent results are on the first page, the second page will contain earlier results, and so on. To get the next page of results, set **Marker** to the value of the **NextMarker** from the current page's response. This value is the same as the ID of the last invalidation batch on that page.

### **MaxItems** (p. 142)

The maximum number of invalidation batches that you want in the response body.

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
<?xml version="1.0" encoding="UTF-8"?>
<InvalidationList>
  <IsTruncated>boolean</IsTruncated>
  <Items>
    <InvalidationSummary>
      <CreateTime>timestamp</CreateTime>
      <Id>string</Id>
      <Status>string</Status>
    </InvalidationSummary>
  </Items>
  <Marker>string</Marker>
  <MaxItems>integer</MaxItems>
  <NextMarker>string</NextMarker>
  <Quantity>integer</Quantity>
</InvalidationList>
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in XML format by the service.

#### [InvalidationList \(p. 142\)](#)

Root level tag for the Invalidations parameters.

Required: Yes

#### [IsTruncated \(p. 142\)](#)

A flag that indicates whether more invalidation batch requests remain to be listed. If your results were truncated, you can make a follow-up pagination request using the `Marker` request parameter to retrieve more invalidation batches in the list.

Type: Boolean

#### [Items \(p. 142\)](#)

A complex type that contains one `InvalidationSummary` element for each invalidation batch created by the current AWS account.

Type: Array of [InvalidationSummary \(p. 262\)](#) objects

#### [Marker \(p. 142\)](#)

The value that you provided for the `Marker` request parameter.

Type: String

#### [MaxItems \(p. 142\)](#)

The value that you provided for the `MaxItems` request parameter.

Type: Integer

#### [NextMarker \(p. 142\)](#)

If `IsTruncated` is `true`, this element is present and contains the value that you can use for the `Marker` request parameter to continue listing your invalidation batches where they left off.

Type: String

#### [Quantity \(p. 142\)](#)

The number of invalidation batches that were created by the current AWS account.

Type: Integer

## Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 312\)](#).

### **AccessDenied**

Access denied.

HTTP Status Code: 403

### **InvalidArgumentException**

The argument is invalid.

HTTP Status Code: 400

### NoSuchDistribution

The specified distribution does not exist.

HTTP Status Code: 404

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java](#)
- [AWS SDK for JavaScript](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V2](#)

# ListPublicKeys

List all public keys that have been added to CloudFront for this account.

## Request Syntax

```
GET /2019-03-26/public-key?Marker=Marker&MaxItems=MaxItems HTTP/1.1
```

## URI Request Parameters

The request requires the following URI parameters.

### [Marker \(p. 145\)](#)

Use this when paginating results to indicate where to begin in your list of public keys. The results include public keys in the list that occur after the marker. To get the next page of results, set the `Marker` to the value of the `NextMarker` from the current page's response (which is also the ID of the last public key on that page).

### [MaxItems \(p. 145\)](#)

The maximum number of public keys you want in the response body.

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
<?xml version="1.0" encoding="UTF-8"?>
<PublicKeyList>
  <Items>
    <PublicKeySummary>
      <Comment>string</Comment>
      <CreatedTime>timestamp</CreatedTime>
      <EncodedKey>string</EncodedKey>
      <Id>string</Id>
      <Name>string</Name>
    </PublicKeySummary>
  </Items>
  <MaxItems>integer</MaxItems>
  <NextMarker>string</NextMarker>
  <Quantity>integer</Quantity>
</PublicKeyList>
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in XML format by the service.

### [PublicKeyList \(p. 145\)](#)

Root level tag for the PublicKeyList parameters.

Required: Yes

#### [Items \(p. 145\)](#)

An array of information about a public key you add to CloudFront to use with features like field-level encryption.

Type: Array of [PublicKeySummary \(p. 283\)](#) objects

#### [MaxItems \(p. 145\)](#)

The maximum number of public keys you want in the response body.

Type: Integer

#### [NextMarker \(p. 145\)](#)

If there are more elements to be listed, this element is present and contains the value that you can use for the `Marker` request parameter to continue listing your public keys where you left off.

Type: String

#### [Quantity \(p. 145\)](#)

The number of public keys you added to CloudFront to use with features like field-level encryption.

Type: Integer

## Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 312\)](#).

### **InvalidArgument**

The argument is invalid.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java](#)
- [AWS SDK for JavaScript](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V2](#)

# ListStreamingDistributions

List streaming distributions.

## Request Syntax

```
GET /2019-03-26/streaming-distribution?Marker=Marker&MaxItems=MaxItems HTTP/1.1
```

## URI Request Parameters

The request requires the following URI parameters.

### [Marker \(p. 147\)](#)

The value that you provided for the `Marker` request parameter.

### [MaxItems \(p. 147\)](#)

The value that you provided for the `MaxItems` request parameter.

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
<?xml version="1.0" encoding="UTF-8"?>
<StreamingDistributionList>
  <IsTruncated>boolean</IsTruncated>
  <Items>
    <StreamingDistributionSummary>
      <Aliases>
        <Items>
          <CNAME>string</CNAME>
        </Items>
        <Quantity>integer</Quantity>
      </Aliases>
      <ARN>string</ARN>
      <Comment>string</Comment>
      <DomainName>string</DomainName>
      <Enabled>boolean</Enabled>
      <Id>string</Id>
      <LastModifiedTime>timestampl</LastModifiedTime>
      <PriceClass>string</PriceClass>
      <S3Origin>
        <DomainName>string</DomainName>
        <OriginAccessIdentity>string</OriginAccessIdentity>
      </S3Origin>
      <Status>string</Status>
      <TrustedSigners>
        <Enabled>boolean</Enabled>
        <Items>
          <AwsAccountNumber>string</AwsAccountNumber>
        </Items>
        <Quantity>integer</Quantity>
      </TrustedSigners>
    </StreamingDistributionSummary>
  </Items>
</StreamingDistributionList>
```

```
</StreamingDistributionSummary>
</Items>
<Marker>string</Marker>
<MaxItems>integer</MaxItems>
<NextMarker>string</NextMarker>
<Quantity>integer</Quantity>
</StreamingDistributionList>
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in XML format by the service.

### [StreamingDistributionList \(p. 147\)](#)

Root level tag for the StreamingDistributionList parameters.

Required: Yes

### [IsTruncated \(p. 147\)](#)

A flag that indicates whether more streaming distributions remain to be listed. If your results were truncated, you can make a follow-up pagination request using the `Marker` request parameter to retrieve more distributions in the list.

Type: Boolean

### [Items \(p. 147\)](#)

A complex type that contains one `StreamingDistributionSummary` element for each distribution that was created by the current AWS account.

Type: Array of [StreamingDistributionSummary \(p. 300\)](#) objects

### [Marker \(p. 147\)](#)

The value you provided for the `Marker` request parameter.

Type: String

### [MaxItems \(p. 147\)](#)

The value you provided for the `MaxItems` request parameter.

Type: Integer

### [NextMarker \(p. 147\)](#)

If `IsTruncated` is `true`, this element is present and contains the value you can use for the `Marker` request parameter to continue listing your RTMP distributions where they left off.

Type: String

### [Quantity \(p. 147\)](#)

The number of streaming distributions that were created by the current AWS account.

Type: Integer

## Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 312\)](#).

### InvalidArgumentException

The argument is invalid.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java](#)
- [AWS SDK for JavaScript](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V2](#)

# ListTagsForResource

List tags for a CloudFront resource.

## Request Syntax

```
GET /2019-03-26/tagging?Resource=Resource HTTP/1.1
```

## URI Request Parameters

The request requires the following URI parameters.

### [Resource \(p. 150\)](#)

An ARN of a CloudFront resource.

Pattern: arn:aws(-cn)?::cloudfront::[0-9]+::.\*

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
<?xml version="1.0" encoding="UTF-8"?>
<Tags>
  <Items>
    <Tag>
      <Key>string</Key>
      <Value>string</Value>
    </Tag>
  </Items>
</Tags>
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in XML format by the service.

### [Tags \(p. 150\)](#)

Root level tag for the Tags parameters.

Required: Yes

### [Items \(p. 150\)](#)

A complex type that contains Tag elements.

Type: Array of [Tag \(p. 303\)](#) objects

## Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 312\)](#).

### **AccessDenied**

Access denied.

HTTP Status Code: 403

### **InvalidArgument**

The argument is invalid.

HTTP Status Code: 400

### **InvalidTagging**

Tagging specified in the response body is not valid.

HTTP Status Code: 400

### **NoSuchResource**

A resource that was specified is not valid.

HTTP Status Code: 404

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java](#)
- [AWS SDK for JavaScript](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V2](#)

# TagResource

Add tags to a CloudFront resource.

## Request Syntax

```
POST /2019-03-26/tagging?Operation=Tag HTTP/1.1
<?xml version="1.0" encoding="UTF-8"?>
<Tags xmlns="http://cloudfront.amazonaws.com/doc/2019-03-26/">
  <Items>
    <Tag>
      <Key>string</Key>
      <Value>string</Value>
    </Tag>
  </Items>
</Tags>
```

## URI Request Parameters

The request does not use any URI parameters.

## Request Body

The request accepts the following data in XML format.

### [Tags \(p. 152\)](#)

Root level tag for the Tags parameters.

Required: Yes

### [Items \(p. 152\)](#)

A complex type that contains Tag elements.

Type: Array of [Tag \(p. 303\)](#) objects

Required: No

## Response Syntax

```
HTTP/1.1 204
```

## Response Elements

If the action is successful, the service sends back an HTTP 204 response with an empty HTTP body.

## Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 312\)](#).

### **AccessDenied**

Access denied.

HTTP Status Code: 403

**InvalidArgument**

The argument is invalid.

HTTP Status Code: 400

**InvalidTagging**

Tagging specified in the response body is not valid.

HTTP Status Code: 400

**NoSuchResource**

A resource that was specified is not valid.

HTTP Status Code: 404

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java](#)
- [AWS SDK for JavaScript](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V2](#)

# UntagResource

Remove tags from a CloudFront resource.

## Request Syntax

```
POST /2019-03-26/tagging?Operation=Untag HTTP/1.1
<?xml version="1.0" encoding="UTF-8"?>
<TagKeys xmlns="http://cloudfront.amazonaws.com/doc/2019-03-26/">
  <Items>
    <Key>string</Key>
  </Items>
</TagKeys>
```

## URI Request Parameters

The request does not use any URI parameters.

## Request Body

The request accepts the following data in XML format.

### TagKeys (p. 154)

Root level tag for the TagKeys parameters.

Required: Yes

### Items (p. 154)

A complex type that contains Tag key elements.

Type: Array of strings

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: ^([\\p{L}\\p{Z}]\\p{N}\_.:/:=+\\-@]\*\$

Required: No

## Response Syntax

```
HTTP/1.1 204
```

## Response Elements

If the action is successful, the service sends back an HTTP 204 response with an empty HTTP body.

## Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 312\)](#).

**AccessDenied**

Access denied.

HTTP Status Code: 403

**InvalidArgument**

The argument is invalid.

HTTP Status Code: 400

**InvalidTagging**

Tagging specified in the response body is not valid.

HTTP Status Code: 400

**NoSuchResource**

A resource that was specified is not valid.

HTTP Status Code: 404

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java](#)
- [AWS SDK for JavaScript](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V2](#)

# UpdateCloudFrontOriginAccessIdentity

Update an origin access identity.

## Request Syntax

```
PUT /2019-03-26/origin-access-identity/cloudfront/Id/config HTTP/1.1
<?xml version="1.0" encoding="UTF-8"?>
<CloudFrontOriginAccessIdentityConfig xmlns="http://cloudfront.amazonaws.com/doc/2019-03-26/">
  <CallerReference>string</CallerReference>
  <Comment>string</Comment>
</CloudFrontOriginAccessIdentityConfig>
```

## URI Request Parameters

The request does not use any URI parameters.

## Request Body

The request accepts the following data in XML format.

### [CloudFrontOriginAccessIdentityConfig \(p. 156\)](#)

Root level tag for the CloudFrontOriginAccessIdentityConfig parameters.

Required: Yes

#### [CallerReference \(p. 156\)](#)

A unique value (for example, a date-time stamp) that ensures that the request can't be replayed.

If the value of CallerReference is new (regardless of the content of the CloudFrontOriginAccessIdentityConfig object), a new origin access identity is created.

If the CallerReference is a value already sent in a previous identity request, and the content of the CloudFrontOriginAccessIdentityConfig is identical to the original request (ignoring white space), the response includes the same information returned to the original request.

If the CallerReference is a value you already sent in a previous request to create an identity, but the content of the CloudFrontOriginAccessIdentityConfig is different from the original request, CloudFront returns a CloudFrontOriginAccessIdentityAlreadyExists error.

Type: String

Required: Yes

#### [Comment \(p. 156\)](#)

Any comments you want to include about the origin access identity.

Type: String

Required: Yes

## Response Syntax

```
HTTP/1.1 200
```

```
<?xml version="1.0" encoding="UTF-8"?>
<CloudFrontOriginAccessIdentity>
  <CloudFrontOriginAccessIdentityConfig>
    <CallerReference>string</CallerReference>
    <Comment>string</Comment>
  </CloudFrontOriginAccessIdentityConfig>
  <Id>string</Id>
  <S3CanonicalUserId>string</S3CanonicalUserId>
</CloudFrontOriginAccessIdentity>
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in XML format by the service.

### [CloudFrontOriginAccessIdentity \(p. 156\)](#)

Root level tag for the CloudFrontOriginAccessIdentity parameters.

Required: Yes

### [CloudFrontOriginAccessIdentityConfig \(p. 156\)](#)

The current configuration information for the identity.

Type: [CloudFrontOriginAccessIdentityConfig \(p. 210\)](#) object

### [Id \(p. 156\)](#)

The ID for the origin access identity, for example, E74FTE3AJFJ256A.

Type: String

### [S3CanonicalUserId \(p. 156\)](#)

The Amazon S3 canonical user ID for the origin access identity, used when giving the origin access identity read permission to an object in Amazon S3.

Type: String

## Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 312\)](#).

### **AccessDenied**

Access denied.

HTTP Status Code: 403

### **IllegalUpdate**

Origin and CallerReference cannot be updated.

HTTP Status Code: 400

### **InconsistentQuantities**

The value of Quantity and the size of Items don't match.

HTTP Status Code: 400

### **InvalidArgumentException**

The argument is invalid.

HTTP Status Code: 400

### **InvalidIfMatchVersion**

The `If-Match` version is missing or not valid for the distribution.

HTTP Status Code: 400

### **MissingBody**

This operation requires a body. Ensure that the body is present and the `Content-Type` header is set.

HTTP Status Code: 400

### **NoSuchCloudFrontOriginAccessIdentity**

The specified origin access identity does not exist.

HTTP Status Code: 404

### **PreconditionFailed**

The precondition given in one or more of the request-header fields evaluated to `false`.

HTTP Status Code: 412

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java](#)
- [AWS SDK for JavaScript](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V2](#)

# UpdateDistribution

Updates the configuration for a web distribution.

## Important

When you update a distribution, there are more required fields than when you create a distribution. When you update your distribution by using this API action, follow the steps here to get the current configuration and then make your updates, to make sure that you include all of the required fields. To view a summary, see [Required Fields for Create Distribution and Update Distribution](#) in the *Amazon CloudFront Developer Guide*.

The update process includes getting the current distribution configuration, updating the XML document that is returned to make your changes, and then submitting an `UpdateDistribution` request to make the updates.

For information about updating a distribution using the CloudFront console instead, see [Creating a Distribution](#) in the *Amazon CloudFront Developer Guide*.

## To update a web distribution using the CloudFront API

1. Submit a [GetDistributionConfig](#) request to get the current configuration and an `Etag` header for the distribution.

### Note

If you update the distribution again, you must get a new `Etag` header.

2. Update the XML document that was returned in the response to your `GetDistributionConfig` request to include your changes.

### Important

When you edit the XML file, be aware of the following:

- You must strip out the `ETag` parameter that is returned.
- Additional fields are required when you update a distribution. There may be fields included in the XML file for features that you haven't configured for your distribution. This is expected and required to successfully update the distribution.
- You can't change the value of `CallerReference`. If you try to change this value, CloudFront returns an `IllegalUpdate` error.
- The new configuration replaces the existing configuration; the values that you specify in an `UpdateDistribution` request are not merged into your existing configuration. When you add, delete, or replace values in an element that allows multiple values (for example, `CNAME`), you must specify all of the values that you want to appear in the updated distribution. In addition, you must update the corresponding `Quantity` element.

3. Submit an `UpdateDistribution` request to update the configuration for your distribution:

- In the request body, include the XML document that you updated in Step 2. The request body must include an XML document with a `DistributionConfig` element.
- Set the value of the HTTP `If-Match` header to the value of the `Etag` header that CloudFront returned when you submitted the `GetDistributionConfig` request in Step 1.

4. Review the response to the `UpdateDistribution` request to confirm that the configuration was successfully updated.

5. Optional: Submit a [GetDistribution](#) request to confirm that your changes have propagated. When propagation is complete, the value of `Status` is `Deployed`.

## Request Syntax

```
PUT /2019-03-26/distribution/Id/config HTTP/1.1
<?xml version="1.0" encoding="UTF-8"?>
```

```
<DistributionConfig xmlns="http://cloudfront.amazonaws.com/doc/2019-03-26/">
  <Aliases>
    <Items>
      <CNAME>string</CNAME>
    </Items>
    <Quantity>integer</Quantity>
  </Aliases>
  <CacheBehaviors>
    <Items>
      <CacheBehavior>
        <AllowedMethods>
          <CachedMethods>
            <Items>
              <Method>string</Method>
            </Items>
            <Quantity>integer</Quantity>
          </CachedMethods>
        <Items>
          <Method>string</Method>
        </Items>
        <Quantity>integer</Quantity>
      </AllowedMethods>
      <Compress>boolean</Compress>
      <DefaultTTL>long</DefaultTTL>
      <FieldLevelEncryptionId>string</FieldLevelEncryptionId>
      <ForwardedValues>
        <Cookies>
          <Forward>string</Forward>
          <WhitelistedNames>
            <Items>
              <Name>string</Name>
            </Items>
            <Quantity>integer</Quantity>
          </WhitelistedNames>
        </Cookies>
        <Headers>
          <Items>
            <Name>string</Name>
          </Items>
          <Quantity>integer</Quantity>
        </Headers>
        <QueryString>boolean</QueryString>
        <QueryStringCacheKeys>
          <Items>
            <Name>string</Name>
          </Items>
          <Quantity>integer</Quantity>
        </QueryStringCacheKeys>
      </ForwardedValues>
      <LambdaFunctionAssociations>
        <Items>
          <LambdaFunctionAssociation>
            <EventType>string</EventType>
            <IncludeBody>boolean</IncludeBody>
            <LambdaFunctionARN>string</LambdaFunctionARN>
          </LambdaFunctionAssociation>
        </Items>
        <Quantity>integer</Quantity>
      </LambdaFunctionAssociations>
      <MaxTTL>long</MaxTTL>
      <MinTTL>long</MinTTL>
      <PathPattern>string</PathPattern>
      <SmoothStreaming>boolean</SmoothStreaming>
      <TargetOriginId>string</TargetOriginId>
      <TrustedSigners>
        <Enabled>boolean</Enabled>
```

```
<Items>
    <AwsAccountNumber>string</AwsAccountNumber>
</Items>
    <Quantity>integer</Quantity>
</TrustedSigners>
    <ViewerProtocolPolicy>string</ViewerProtocolPolicy>
</CacheBehavior>
</Items>
    <Quantity>integer</Quantity>
</CacheBehaviors>
<CallerReference>string</CallerReference>
<Comment>string</Comment>
<CustomErrorResponses>
    <Items>
        <CustomErrorResponse>
            <ErrorCachingMinTTL>long</ErrorCachingMinTTL>
            <ErrorCode>integer</ErrorCode>
            <ResponseCode>string</ResponseCode>
            <ResponsePagePath>string</ResponsePagePath>
        </CustomErrorResponse>
    </Items>
    <Quantity>integer</Quantity>
</CustomErrorResponses>
<DefaultCacheBehavior>
    <AllowedMethods>
        <CachedMethods>
            <Items>
                <Method>string</Method>
            </Items>
            <Quantity>integer</Quantity>
        </CachedMethods>
            <Items>
                <Method>string</Method>
            </Items>
            <Quantity>integer</Quantity>
        </AllowedMethods>
<Compress>boolean</Compress>
<DefaultTTL>long</DefaultTTL>
<FieldLevelEncryptionId>string</FieldLevelEncryptionId>
<ForwardedValues>
    <Cookies>
        <Forward>string</Forward>
        <WhitelistedNames>
            <Items>
                <Name>string</Name>
            </Items>
            <Quantity>integer</Quantity>
        </WhitelistedNames>
    </Cookies>
    <Headers>
        <Items>
            <Name>string</Name>
        </Items>
        <Quantity>integer</Quantity>
    </Headers>
    <QueryString>boolean</QueryString>
    <QueryStringCacheKeys>
        <Items>
            <Name>string</Name>
        </Items>
        <Quantity>integer</Quantity>
    </QueryStringCacheKeys>
</ForwardedValues>
<LambdaFunctionAssociations>
    <Items>
        <LambdaFunctionAssociation>
```

```
<EventType>string</EventType>
<IncludeBody>boolean</IncludeBody>
<LambdaFunctionARN>string</LambdaFunctionARN>
</LambdaFunctionAssociation>
</Items>
<Quantity>integer</Quantity>
</LambdaFunctionAssociations>
<MaxTTL>long</MaxTTL>
<MinTTL>long</MinTTL>
<SmoothStreaming>boolean</SmoothStreaming>
<TargetOriginId>string</TargetOriginId>
<TrustedSigners>
    <Enabled>boolean</Enabled>
    <Items>
        <AwsAccountNumber>string</AwsAccountNumber>
    </Items>
    <Quantity>integer</Quantity>
</TrustedSigners>
    <ViewerProtocolPolicy>string</ViewerProtocolPolicy>
</DefaultCacheBehavior>
<DefaultRootObject>string</DefaultRootObject>
<Enabled>boolean</Enabled>
<HttpVersion>string</HttpVersion>
<IsIPV6Enabled>boolean</IsIPV6Enabled>
<Logging>
    <Bucket>string</Bucket>
    <Enabled>boolean</Enabled>
    <IncludeCookies>boolean</IncludeCookies>
    <Prefix>string</Prefix>
</Logging>
<OriginGroups>
    <Items>
        <OriginGroup>
            <FailoverCriteria>
                <StatusCodes>
                    <Items>
                        <StatusCode>integer</StatusCode>
                    </Items>
                    <Quantity>integer</Quantity>
                </StatusCodes>
            </FailoverCriteria>
            <Id>string</Id>
            <Members>
                <Items>
                    <OriginGroupMember>
                        <OriginId>string</OriginId>
                    </OriginGroupMember>
                </Items>
                <Quantity>integer</Quantity>
            </Members>
        </OriginGroup>
    </Items>
    <Quantity>integer</Quantity>
</OriginGroups>
<Origins>
    <Items>
        <Origin>
            <CustomHeaders>
                <Items>
                    <OriginCustomHeader>
                        <HeaderName>string</HeaderName>
                        <HeaderValue>string</HeaderValue>
                    </OriginCustomHeader>
                </Items>
                <Quantity>integer</Quantity>
            </CustomHeaders>
        </Origin>
    </Items>
    <Quantity>integer</Quantity>
</Origins>
```

```
<CustomOriginConfig>
  <HTTPPort>integer</HTTPPort>
  <HTTPSPort>integer</HTTPSPort>
  <OriginKeepaliveTimeout>integer</OriginKeepaliveTimeout>
  <OriginProtocolPolicy>string</OriginProtocolPolicy>
  <OriginReadTimeout>integer</OriginReadTimeout>
  <OriginSslProtocols>
    <Items>
      <SslProtocol>string</SslProtocol>
    </Items>
    <Quantity>integer</Quantity>
  </OriginSslProtocols>
</CustomOriginConfig>
<DomainName>string</DomainName>
<Id>string</Id>
<OriginPath>string</OriginPath>
<S3OriginConfig>
  <OriginAccessIdentity>string</OriginAccessIdentity>
</S3OriginConfig>
</Origin>
</Items>
<Quantity>integer</Quantity>
</Origins>
<PriceClass>string</PriceClass>
<Restrictions>
  <GeoRestriction>
    <Items>
      <Location>string</Location>
    </Items>
    <Quantity>integer</Quantity>
    <RestrictionType>string</RestrictionType>
  </GeoRestriction>
</Restrictions>
<ViewerCertificate>
  <ACMCertificateArn>string</ACMCertificateArn>
  <Certificate>string</Certificate>
  <CertificateSource>string</CertificateSource>
  <CloudFrontDefaultCertificate>boolean</CloudFrontDefaultCertificate>
  <IAMCertificateId>string</IAMCertificateId>
  <MinimumProtocolVersion>string</MinimumProtocolVersion>
  <SSLSupportMethod>string</SSLSupportMethod>
</ViewerCertificate>
<WebACLId>string</WebACLId>
</DistributionConfig>
```

## URI Request Parameters

The request does not use any URI parameters.

## Request Body

The request accepts the following data in XML format.

### [DistributionConfig \(p. 159\)](#)

Root level tag for the DistributionConfig parameters.

Required: Yes

### [Aliases \(p. 159\)](#)

A complex type that contains information about CNAMEs (alternate domain names), if any, for this distribution.

Type: [Aliases \(p. 199\)](#) object

Required: No

#### [CacheBehaviors \(p. 159\)](#)

A complex type that contains zero or more CacheBehavior elements.

Type: [CacheBehaviors \(p. 207\)](#) object

Required: No

#### [CallerReference \(p. 159\)](#)

A unique value (for example, a date-time stamp) that ensures that the request can't be replayed.

If the value of CallerReference is new (regardless of the content of the DistributionConfig object), CloudFront creates a new distribution.

If CallerReference is a value that you already sent in a previous request to create a distribution, CloudFront returns a `DistributionAlreadyExists` error.

Type: String

Required: Yes

#### [Comment \(p. 159\)](#)

Any comments you want to include about the distribution.

If you don't want to specify a comment, include an empty Comment element.

To delete an existing comment, update the distribution configuration and include an empty Comment element.

To add or change a comment, update the distribution configuration and specify the new comment.

Type: String

Required: Yes

#### [CustomErrorResponses \(p. 159\)](#)

A complex type that controls the following:

- Whether CloudFront replaces HTTP status codes in the 4xx and 5xx range with custom error messages before returning the response to the viewer.
- How long CloudFront caches HTTP status codes in the 4xx and 5xx range.

For more information about custom error pages, see [Customizing Error Responses](#) in the *Amazon CloudFront Developer Guide*.

Type: [CustomErrorResponses \(p. 221\)](#) object

Required: No

#### [DefaultCacheBehavior \(p. 159\)](#)

A complex type that describes the default cache behavior if you don't specify a CacheBehavior element or if files don't match any of the values of PathPattern in CacheBehavior elements. You must create exactly one default cache behavior.

Type: [DefaultCacheBehavior \(p. 225\)](#) object

Required: Yes

### [DefaultRootObject \(p. 159\)](#)

The object that you want CloudFront to request from your origin (for example, `index.html`) when a viewer requests the root URL for your distribution (`http://www.example.com`) instead of an object in your distribution (`http://www.example.com/product-description.html`). Specifying a default root object avoids exposing the contents of your distribution.

Specify only the object name, for example, `index.html`. Don't add a `/` before the object name.

If you don't want to specify a default root object when you create a distribution, include an empty `DefaultRootObject` element.

To delete the default root object from an existing distribution, update the distribution configuration and include an empty `DefaultRootObject` element.

To replace the default root object, update the distribution configuration and specify the new object.

For more information about the default root object, see [Creating a Default Root Object](#) in the *Amazon CloudFront Developer Guide*.

Type: String

Required: No

### [Enabled \(p. 159\)](#)

From this field, you can enable or disable the selected distribution.

Type: Boolean

Required: Yes

### [HttpVersion \(p. 159\)](#)

(Optional) Specify the maximum HTTP version that you want viewers to use to communicate with CloudFront. The default value for new web distributions is `http2`. Viewers that don't support `HTTP/2` automatically use an earlier HTTP version.

For viewers and CloudFront to use `HTTP/2`, viewers must support TLS 1.2 or later, and must support Server Name Identification (SNI).

In general, configuring CloudFront to communicate with viewers using `HTTP/2` reduces latency. You can improve performance by optimizing for `HTTP/2`. For more information, do an Internet search for "http/2 optimization."

Type: String

Valid Values: `http1.1` | `http2`

Required: No

### [IsIPV6Enabled \(p. 159\)](#)

If you want CloudFront to respond to IPv6 DNS requests with an IPv6 address for your distribution, specify `true`. If you specify `false`, CloudFront responds to IPv6 DNS requests with the DNS response code `NOERROR` and with no IP addresses. This allows viewers to submit a second request, for an IPv4 address for your distribution.

In general, you should enable IPv6 if you have users on IPv6 networks who want to access your content. However, if you're using signed URLs or signed cookies to restrict access to your content, and if you're using a custom policy that includes the `IpAddress` parameter to restrict the IP addresses that can access your content, don't enable IPv6. If you want to restrict access to some content by IP address and not restrict access to other content (or restrict access but not by IP

address), you can create two distributions. For more information, see [Creating a Signed URL Using a Custom Policy](#) in the *Amazon CloudFront Developer Guide*.

If you're using an Amazon Route 53 alias resource record set to route traffic to your CloudFront distribution, you need to create a second alias resource record set when both of the following are true:

- You enable IPv6 for the distribution
- You're using alternate domain names in the URLs for your objects

For more information, see [Routing Traffic to an Amazon CloudFront Web Distribution by Using Your Domain Name](#) in the *Amazon Route 53 Developer Guide*.

If you created a CNAME resource record set, either with Amazon Route 53 or with another DNS service, you don't need to make any changes. A CNAME record will route traffic to your distribution regardless of the IP address format of the viewer request.

Type: Boolean

Required: No

#### [Logging \(p. 159\)](#)

A complex type that controls whether access logs are written for the distribution.

For more information about logging, see [Access Logs](#) in the *Amazon CloudFront Developer Guide*.

Type: [LoggingConfig \(p. 267\)](#) object

Required: No

#### [OriginGroups \(p. 159\)](#)

A complex type that contains information about origin groups for this distribution.

Type: [OriginGroups \(p. 276\)](#) object

Required: No

#### [Origins \(p. 159\)](#)

A complex type that contains information about origins for this distribution.

Type: [Origins \(p. 277\)](#) object

Required: Yes

#### [PriceClass \(p. 159\)](#)

The price class that corresponds with the maximum price that you want to pay for CloudFront service. If you specify `PriceClass_All`, CloudFront responds to requests for your objects from all CloudFront edge locations.

If you specify a price class other than `PriceClass_All`, CloudFront serves your objects from the CloudFront edge location that has the lowest latency among the edge locations in your price class. Viewers who are in or near regions that are excluded from your specified price class may encounter slower performance.

For more information about price classes, see [Choosing the Price Class for a CloudFront Distribution](#) in the *Amazon CloudFront Developer Guide*. For information about CloudFront pricing, including how price classes (such as Price Class 100) map to CloudFront regions, see [Amazon CloudFront Pricing](#). For price class information, scroll down to see the table at the bottom of the page.

Type: String

Valid Values: `PriceClass_100` | `PriceClass_200` | `PriceClass_All`

Required: No

#### [Restrictions \(p. 159\)](#)

A complex type that identifies ways in which you want to restrict distribution of your content.

Type: [Restrictions \(p. 288\)](#) object

Required: No

#### [ViewerCertificate \(p. 159\)](#)

A complex type that specifies whether you want viewers to use HTTP or HTTPS to request your objects, whether you're using an alternate domain name with HTTPS, and if so, if you're using AWS Certificate Manager (ACM) or a third-party certificate authority.

Type: [ViewerCertificate \(p. 307\)](#) object

Required: No

#### [WebACLId \(p. 159\)](#)

A unique identifier that specifies the AWS WAF web ACL, if any, to associate with this distribution.

AWS WAF is a web application firewall that lets you monitor the HTTP and HTTPS requests that are forwarded to CloudFront, and lets you control access to your content. Based on conditions that you specify, such as the IP addresses that requests originate from or the values of query strings, CloudFront responds to requests either with the requested content or with an HTTP 403 status code (Forbidden). You can also configure CloudFront to return a custom error page when a request is blocked. For more information about AWS WAF, see the [AWS WAF Developer Guide](#).

Type: String

Required: No

## Response Syntax

```
HTTP/1.1 200
<?xml version="1.0" encoding="UTF-8"?>
<Distribution>
  <ActiveTrustedSigners>
    <Enabled>boolean</Enabled>
    <Items>
      <Signer>
        <AwsAccountNumber>string</AwsAccountNumber>
        <KeyPairIds>
          <Items>
            <KeyValuePairId>string</KeyValuePairId>
          </Items>
          <Quantity>integer</Quantity>
        </KeyPairIds>
      </Signer>
    </Items>
    <Quantity>integer</Quantity>
  </ActiveTrustedSigners>
  <AliasICPRecordals>
    <AliasICPRecordal>
      <CNAME>string</CNAME>
      <ICPRecordalStatus>string</ICPRecordalStatus>
    </AliasICPRecordal>
  </AliasICPRecordals>
</Distribution>
```

```

</AliasICPRecords>
<ARN>string</ARN>
<DistributionConfig>
  <Aliases>
    <Items>
      <CNAME>string</CNAME>
    </Items>
    <Quantity>integer</Quantity>
  </Aliases>
  <CacheBehaviors>
    <Items>
      <CacheBehavior>
        <AllowedMethods>
          <CachedMethods>
            <Items>
              <Method>string</Method>
            </Items>
            <Quantity>integer</Quantity>
          </CachedMethods>
          <Items>
            <Method>string</Method>
          </Items>
            <Quantity>integer</Quantity>
          </AllowedMethods>
        <Compress>boolean</Compress>
        <DefaultTTL>long</DefaultTTL>
        <FieldLevelEncryptionId>string</FieldLevelEncryptionId>
        <ForwardedValues>
          <Cookies>
            <Forward>string</Forward>
            <WhitelistedNames>
              <Items>
                <Name>string</Name>
              </Items>
                <Quantity>integer</Quantity>
              </WhitelistedNames>
            </Cookies>
            <Headers>
              <Items>
                <Name>string</Name>
              </Items>
                <Quantity>integer</Quantity>
            </Headers>
            <QueryString>boolean</QueryString>
            <QueryStringCacheKeys>
              <Items>
                <Name>string</Name>
              </Items>
                <Quantity>integer</Quantity>
              </QueryStringCacheKeys>
            </ForwardedValues>
            <LambdaFunctionAssociations>
              <Items>
                <LambdaFunctionAssociation>
                  <EventType>string</EventType>
                  <IncludeBody>boolean</IncludeBody>
                  <LambdaFunctionARN>string</LambdaFunctionARN>
                </LambdaFunctionAssociation>
              </Items>
              <Quantity>integer</Quantity>
            </LambdaFunctionAssociations>
            <MaxTTL>long</MaxTTL>
            <MinTTL>long</MinTTL>
            <PathPattern>string</PathPattern>
            <SmoothStreaming>boolean</SmoothStreaming>
            <TargetOriginId>string</TargetOriginId>

```

```
<TrustedSigners>
  <Enabled>boolean</Enabled>
  <Items>
    <AwsAccountNumber>string</AwsAccountNumber>
  </Items>
  <Quantity>integer</Quantity>
</TrustedSigners>
<ViewerProtocolPolicy>string</ViewerProtocolPolicy>
</CacheBehavior>
</Items>
<Quantity>integer</Quantity>
</CacheBehaviors>
<CallerReference>string</CallerReference>
<Comment>string</Comment>
<CustomErrorResponses>
  <Items>
    <CustomErrorResponse>
      <ErrorCachingMinTTL>long</ErrorCachingMinTTL>
      <ErrorCode>integer</ErrorCode>
      <ResponseCode>string</ResponseCode>
      <ResponsePagePath>string</ResponsePagePath>
    </CustomErrorResponse>
  </Items>
  <Quantity>integer</Quantity>
</CustomErrorResponses>
<DefaultCacheBehavior>
  <AllowedMethods>
    <CachedMethods>
      <Items>
        <Method>string</Method>
      </Items>
      <Quantity>integer</Quantity>
    </CachedMethods>
    <Items>
      <Method>string</Method>
    </Items>
    <Quantity>integer</Quantity>
  </AllowedMethods>
  <Compress>boolean</Compress>
  <DefaultTTL>long</DefaultTTL>
  <FieldLevelEncryptionId>string</FieldLevelEncryptionId>
  <ForwardedValues>
    <Cookies>
      <Forward>string</Forward>
      <WhitelistedNames>
        <Items>
          <Name>string</Name>
        </Items>
        <Quantity>integer</Quantity>
      </WhitelistedNames>
    </Cookies>
    <Headers>
      <Items>
        <Name>string</Name>
      </Items>
      <Quantity>integer</Quantity>
    </Headers>
    <QueryString>boolean</QueryString>
    <QueryStringCacheKeys>
      <Items>
        <Name>string</Name>
      </Items>
      <Quantity>integer</Quantity>
    </QueryStringCacheKeys>
  </ForwardedValues>
  <LambdaFunctionAssociations>
```

```
<Items>
  <LambdaFunctionAssociation>
    <EventType>string</EventType>
    <IncludeBody>boolean</IncludeBody>
    <LambdaFunctionARN>string</LambdaFunctionARN>
  </LambdaFunctionAssociation>
</Items>
  <Quantity>integer</Quantity>
</LambdaFunctionAssociations>
<MaxTTL>long</MaxTTL>
<MinTTL>long</MinTTL>
<SmoothStreaming>boolean</SmoothStreaming>
<TargetOriginId>string</TargetOriginId>
<TrustedSigners>
  <Enabled>boolean</Enabled>
  <Items>
    <AwsAccountNumber>string</AwsAccountNumber>
  </Items>
  <Quantity>integer</Quantity>
</TrustedSigners>
  <ViewerProtocolPolicy>string</ViewerProtocolPolicy>
</DefaultCacheBehavior>
<DefaultRootObject>string</DefaultRootObject>
<Enabled>boolean</Enabled>
<HttpVersion>string</HttpVersion>
<IsIPV6Enabled>boolean</IsIPV6Enabled>
<Logging>
  <Bucket>string</Bucket>
  <Enabled>boolean</Enabled>
  <IncludeCookies>boolean</IncludeCookies>
  <Prefix>string</Prefix>
</Logging>
<OriginGroups>
  <Items>
    <OriginGroup>
      <FailoverCriteria>
        <StatusCodes>
          <Items>
            <StatusCode>integer</StatusCode>
          </Items>
          <Quantity>integer</Quantity>
        </StatusCodes>
      </FailoverCriteria>
      <Id>string</Id>
      <Members>
        <Items>
          <OriginGroupMember>
            <OriginId>string</OriginId>
          </OriginGroupMember>
        </Items>
        <Quantity>integer</Quantity>
      </Members>
    </OriginGroup>
  </Items>
  <Quantity>integer</Quantity>
</OriginGroups>
<Origins>
  <Items>
    <Origin>
      <CustomHeaders>
        <Items>
          <OriginCustomHeader>
            <HeaderName>string</HeaderName>
            <HeaderValue>string</HeaderValue>
          </OriginCustomHeader>
        </Items>
      </CustomHeaders>
    </Origin>
  </Items>

```

```

<Quantity>integer</Quantity>
</CustomHeaders>
<CustomOriginConfig>
    <HTTPPort>integer</HTTPPort>
    <HTTPSPort>integer</HTTPSPort>
    <OriginKeepaliveTimeout>integer</OriginKeepaliveTimeout>
    <OriginProtocolPolicy>string</OriginProtocolPolicy>
    <OriginReadTimeout>integer</OriginReadTimeout>
    <OriginSslProtocols>
        <Items>
            <SslProtocol>string</SslProtocol>
        </Items>
        <Quantity>integer</Quantity>
    </OriginSslProtocols>
</CustomOriginConfig>
<DomainName>string</DomainName>
<Id>string</Id>
<OriginPath>string</OriginPath>
<S3OriginConfig>
    <OriginAccessIdentity>string</OriginAccessIdentity>
</S3OriginConfig>
</Origin>
</Items>
<Quantity>integer</Quantity>
</Origins>
<PriceClass>string</PriceClass>
<Restrictions>
    <GeoRestriction>
        <Items>
            <Location>string</Location>
        </Items>
        <Quantity>integer</Quantity>
        <RestrictionType>string</RestrictionType>
    </GeoRestriction>
</Restrictions>
<ViewerCertificate>
    <ACMCertificateArn>string</ACMCertificateArn>
    <Certificate>string</Certificate>
    <CertificateSource>string</CertificateSource>
    <CloudFrontDefaultCertificate>boolean</CloudFrontDefaultCertificate>
    <IAMCertificateId>string</IAMCertificateId>
    <MinimumProtocolVersion>string</MinimumProtocolVersion>
    <SSLSupportMethod>string</SSLSupportMethod>
</ViewerCertificate>
<WebACLId>string</WebACLId>
</DistributionConfig>
<DomainName>string</DomainName>
<Id>string</Id>
<InProgressInvalidationBatches>integer</InProgressInvalidationBatches>
<LastModifiedTime>timestampl</LastModifiedTime>
<Status>string</Status>
</Distribution>

```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in XML format by the service.

### Distribution (p. 167)

Root level tag for the Distribution parameters.

Required: Yes

### [ActiveTrustedSigners \(p. 167\)](#)

CloudFront automatically adds this element to the response only if you've set up the distribution to serve private content with signed URLs. The element lists the key pair IDs that CloudFront is aware of for each trusted signer. The `Signer` child element lists the AWS account number of the trusted signer (or an empty `Self` element if the signer is you). The `Signer` element also includes the IDs of any active key pairs associated with the trusted signer's AWS account. If no `KeyPairId` element appears for a `Signer`, that signer can't create working signed URLs.

Type: [ActiveTrustedSigners \(p. 198\)](#) object

### [AliasICPRecords \(p. 167\)](#)

AWS services in China customers must file for an Internet Content Provider (ICP) recordal if they want to serve content publicly on an alternate domain name, also known as a CNAME, that they've added to CloudFront. `AliasICPRecordal` provides the ICP recordal status for CNAMEs associated with distributions.

For more information about ICP recordals, see [Signup, Accounts, and Credentials](#) in *Getting Started with AWS services in China*.

Type: Array of [AliasICPRecordal \(p. 200\)](#) objects

### [ARN \(p. 167\)](#)

The ARN (Amazon Resource Name) for the distribution. For example:

`arn:aws:cloudfront::123456789012:distribution/EDFDVBD632BHDS5`, where 123456789012 is your AWS account ID.

Type: String

### [DistributionConfig \(p. 167\)](#)

The current configuration information for the distribution. Send a `GET` request to the `/cloudFront API version/distribution ID/config` resource.

Type: [DistributionConfig \(p. 230\)](#) object

### [DomainName \(p. 167\)](#)

The domain name corresponding to the distribution, for example, `d111111abcdef8.cloudfront.net`.

Type: String

### [Id \(p. 167\)](#)

The identifier for the distribution. For example: `EDFDVBD632BHDS5`.

Type: String

### [InProgressInvalidationBatches \(p. 167\)](#)

The number of invalidation batches currently in progress.

Type: Integer

### [LastModifiedTime \(p. 167\)](#)

The date and time the distribution was last modified.

Type: Timestamp

### [Status \(p. 167\)](#)

This response element indicates the current status of the distribution. When the status is `Deployed`, the distribution's information is fully propagated to all CloudFront edge locations.

Type: String

## Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 312\)](#).

### **AccessDenied**

Access denied.

HTTP Status Code: 403

### **CNAMEAlreadyExists**

The CNAME specified is already defined for CloudFront.

HTTP Status Code: 409

### **IllegalFieldLevelEncryptionConfigAssociationWithCacheBehavior**

The specified configuration for field-level encryption can't be associated with the specified cache behavior.

HTTP Status Code: 400

### **IllegalUpdate**

Origin and `CallerReference` cannot be updated.

HTTP Status Code: 400

### **InconsistentQuantities**

The value of `Quantity` and the size of `Items` don't match.

HTTP Status Code: 400

### **InvalidArgumentException**

The argument is invalid.

HTTP Status Code: 400

### **InvalidDefaultRootObject**

The default root object file name is too big or contains an invalid character.

HTTP Status Code: 400

### **InvalidErrorCode**

An invalid error code was specified.

HTTP Status Code: 400

### **InvalidForwardCookies**

Your request contains forward cookies option which doesn't match with the expectation for the whitelisted list of cookie names. Either list of cookie names has been specified when not allowed or list of cookie names is missing when expected.

HTTP Status Code: 400

### **InvalidGeoRestrictionParameter**

The specified geo restriction parameter is not valid.

HTTP Status Code: 400

**InvalidHeadersForS3Origin**

The headers specified are not valid for an Amazon S3 origin.

HTTP Status Code: 400

**InvalidIfMatchVersion**

The `If-Match` version is missing or not valid for the distribution.

HTTP Status Code: 400

**InvalidLambdaFunctionAssociation**

The specified Lambda function association is invalid.

HTTP Status Code: 400

**InvalidLocationCode**

The location code specified is not valid.

HTTP Status Code: 400

**InvalidMinimumProtocolVersion**

The minimum protocol version specified is not valid.

HTTP Status Code: 400

**InvalidOriginAccessIdentity**

The origin access identity is not valid or doesn't exist.

HTTP Status Code: 400

**InvalidOriginKeepaliveTimeout**

The keep alive timeout specified for the origin is not valid.

HTTP Status Code: 400

**InvalidOriginReadTimeout**

The read timeout specified for the origin is not valid.

HTTP Status Code: 400

**InvalidQueryStringParameters**

Query string parameters specified in the response body are not valid.

HTTP Status Code: 400

**InvalidRelativePath**

The relative path is too big, is not URL-encoded, or does not begin with a slash (/).

HTTP Status Code: 400

**InvalidRequiredProtocol**

This operation requires the HTTPS protocol. Ensure that you specify the HTTPS protocol in your request, or omit the `RequiredProtocols` element from your distribution configuration.

HTTP Status Code: 400

**InvalidResponseCode**

A response code specified in the response body is not valid.

HTTP Status Code: 400

**InvalidTTLOrder**

TTL order specified in the response body is not valid.

HTTP Status Code: 400

**InvalidViewerCertificate**

A viewer certificate specified in the response body is not valid.

HTTP Status Code: 400

**InvalidWebACLIId**

A web ACL id specified in the response body is not valid.

HTTP Status Code: 400

**MissingBody**

This operation requires a body. Ensure that the body is present and the Content-Type header is set.

HTTP Status Code: 400

**NoSuchDistribution**

The specified distribution does not exist.

HTTP Status Code: 404

**NoSuchFieldLevelEncryptionConfig**

The specified configuration for field-level encryption doesn't exist.

HTTP Status Code: 404

**NoSuchOrigin**

No origin exists with the specified Origin Id.

HTTP Status Code: 404

**PreconditionFailed**

The precondition given in one or more of the request-header fields evaluated to false.

HTTP Status Code: 412

**TooManyCacheBehaviors**

You cannot create more cache behaviors for the distribution.

HTTP Status Code: 400

**TooManyCertificates**

You cannot create anymore custom SSL/TLS certificates.

HTTP Status Code: 400

**TooManyCookieNamesInWhiteList**

Your request contains more cookie names in the whitelist than are allowed per cache behavior.

HTTP Status Code: 400

**TooManyDistributionCNAMEs**

Your request contains more CNAMEs than are allowed per distribution.

HTTP Status Code: 400

**TooManyDistributionsAssociatedToFieldLevelEncryptionConfig**

The maximum number of distributions have been associated with the specified configuration for field-level encryption.

HTTP Status Code: 400

**TooManyDistributionsWithLambdaAssociations**

Processing your request would cause the maximum number of distributions with Lambda function associations per owner to be exceeded.

HTTP Status Code: 400

**TooManyHeadersInForwardedValues**

Your request contains too many headers in forwarded values.

HTTP Status Code: 400

**TooManyLambdaFunctionAssociations**

Your request contains more Lambda function associations than are allowed per distribution.

HTTP Status Code: 400

**TooManyOriginCustomHeaders**

Your request contains too many origin custom headers.

HTTP Status Code: 400

**TooManyOriginGroupsPerDistribution**

Processing your request would cause you to exceed the maximum number of origin groups allowed.

HTTP Status Code: 400

**TooManyOrigins**

You cannot create more origins for the distribution.

HTTP Status Code: 400

**TooManyQueryStringParameters**

Your request contains too many query string parameters.

HTTP Status Code: 400

**TooManyTrustedSigners**

Your request contains more trusted signers than are allowed per distribution.

HTTP Status Code: 400

**TrustedSignerDoesNotExist**

One or more of your trusted signers don't exist.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java](#)
- [AWS SDK for JavaScript](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V2](#)

# UpdateFieldLevelEncryptionConfig

Update a field-level encryption configuration.

## Request Syntax

```
PUT /2019-03-26/field-level-encryption/Id/config HTTP/1.1
<?xml version="1.0" encoding="UTF-8"?>
<FieldLevelEncryptionConfig xmlns="http://cloudfront.amazonaws.com/doc/2019-03-26/">
  <CallerReference>string</CallerReference>
  <Comment>string</Comment>
  <ContentTypeProfileConfig>
    <ContentTypeProfiles>
      <Items>
        <ContentTypeProfile>
          <ContentType>string</ContentType>
          <Format>string</Format>
          <ProfileId>string</ProfileId>
        </ContentTypeProfile>
      </Items>
      <Quantity>integer</Quantity>
    </ContentTypeProfiles>
    <ForwardWhenContentTypeIsUnknown>boolean</ForwardWhenContentTypeIsUnknown>
  </ContentTypeProfileConfig>
  <QueryArgProfileConfig>
    <ForwardWhenQueryArgProfileIsUnknown>boolean</ForwardWhenQueryArgProfileIsUnknown>
    <QueryArgProfiles>
      <Items>
        <QueryArgProfile>
          <ProfileId>string</ProfileId>
          <QueryArg>string</QueryArg>
        </QueryArgProfile>
      </Items>
      <Quantity>integer</Quantity>
    </QueryArgProfiles>
  </QueryArgProfileConfig>
</FieldLevelEncryptionConfig>
```

## URI Request Parameters

The request does not use any URI parameters.

## Request Body

The request accepts the following data in XML format.

### [FieldLevelEncryptionConfig \(p. 178\)](#)

Root level tag for the FieldLevelEncryptionConfig parameters.

Required: Yes

### [CallerReference \(p. 178\)](#)

A unique number that ensures the request can't be replayed.

Type: String

Required: Yes

### [Comment \(p. 178\)](#)

An optional comment about the configuration.

Type: String

Required: No

### [ContentTypeProfileConfig \(p. 178\)](#)

A complex data type that specifies when to forward content if a content type isn't recognized and profiles to use as by default in a request if a query argument doesn't specify a profile to use.

Type: [ContentTypeProfileConfig \(p. 215\)](#) object

Required: No

### [QueryArgProfileConfig \(p. 178\)](#)

A complex data type that specifies when to forward content if a profile isn't found and the profile that can be provided as a query argument in a request.

Type: [QueryArgProfileConfig \(p. 285\)](#) object

Required: No

## Response Syntax

```
HTTP/1.1 200
<?xml version="1.0" encoding="UTF-8"?>
<FieldLevelEncryption>
  <FieldLevelEncryptionConfig>
    <CallerReference>string</CallerReference>
    <Comment>string</Comment>
    <ContentTypeProfileConfig>
      <ContentTypeProfiles>
        <Items>
          <ContentTypeProfile>
            <ContentType>string</ContentType>
            <Format>string</Format>
            <ProfileId>string</ProfileId>
          </ContentTypeProfile>
        </Items>
        <Quantity>integer</Quantity>
      </ContentTypeProfiles>
      <ForwardWhenContentTypeIsUnknown>boolean</ForwardWhenContentTypeIsUnknown>
    </ContentTypeProfileConfig>
    <QueryArgProfileConfig>
      <ForwardWhenQueryArgProfileIsUnknown>boolean</ForwardWhenQueryArgProfileIsUnknown>
      <QueryArgProfiles>
        <Items>
          <QueryArgProfile>
            <ProfileId>string</ProfileId>
            <QueryArg>string</QueryArg>
          </QueryArgProfile>
        </Items>
        <Quantity>integer</Quantity>
      </QueryArgProfiles>
    </QueryArgProfileConfig>
  </FieldLevelEncryptionConfig>
  <Id>string</Id>
  <LastModifiedTime>timestamp</LastModifiedTime>
</FieldLevelEncryption>
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in XML format by the service.

### [FieldLevelEncryption \(p. 179\)](#)

Root level tag for the FieldLevelEncryption parameters.

Required: Yes

### [FieldLevelEncryptionConfig \(p. 179\)](#)

A complex data type that includes the profile configurations specified for field-level encryption.

Type: [FieldLevelEncryptionConfig \(p. 244\)](#) object

### [Id \(p. 179\)](#)

The configuration ID for a field-level encryption configuration which includes a set of profiles that specify certain selected data fields to be encrypted by specific public keys.

Type: String

### [LastModifiedTime \(p. 179\)](#)

The last time the field-level encryption configuration was changed.

Type: Timestamp

## Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 312\)](#).

### **AccessDenied**

Access denied.

HTTP Status Code: 403

### **IllegalUpdate**

Origin and `CallerReference` cannot be updated.

HTTP Status Code: 400

### **InconsistentQuantities**

The value of `Quantity` and the size of `Items` don't match.

HTTP Status Code: 400

### **InvalidArgumentException**

The argument is invalid.

HTTP Status Code: 400

### **InvalidIfMatchVersion**

The `If-Match` version is missing or not valid for the distribution.

HTTP Status Code: 400

### NoSuchFieldLevelEncryptionConfig

The specified configuration for field-level encryption doesn't exist.

HTTP Status Code: 404

### NoSuchFieldLevelEncryptionProfile

The specified profile for field-level encryption doesn't exist.

HTTP Status Code: 404

### PreconditionFailed

The precondition given in one or more of the request-header fields evaluated to `false`.

HTTP Status Code: 412

### QueryArgProfileEmpty

No profile specified for the field-level encryption query argument.

HTTP Status Code: 400

### TooManyFieldLevelEncryptionContentTypeProfiles

The maximum number of content type profiles for field-level encryption have been created.

HTTP Status Code: 400

### TooManyFieldLevelEncryptionQueryArgProfiles

The maximum number of query arg profiles for field-level encryption have been created.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java](#)
- [AWS SDK for JavaScript](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V2](#)

# UpdateFieldLevelEncryptionProfile

Update a field-level encryption profile.

## Request Syntax

```
PUT /2019-03-26/field-level-encryption-profile/Id/config HTTP/1.1
<?xml version="1.0" encoding="UTF-8"?>
<FieldLevelEncryptionProfileConfig xmlns="http://cloudfront.amazonaws.com/doc/2019-03-26/">
  <CallerReference>string</CallerReference>
  <Comment>string</Comment>
  <EncryptionEntities>
    <Items>
      <EncryptionEntity>
        <FieldPatterns>
          <Items>
            <FieldPattern>string</FieldPattern>
          </Items>
          <Quantity>integer</Quantity>
        </FieldPatterns>
        <ProviderId>string</ProviderId>
        <PublicKeyId>string</PublicKeyId>
      </EncryptionEntity>
    </Items>
    <Quantity>integer</Quantity>
  </EncryptionEntities>
  <Name>string</Name>
</FieldLevelEncryptionProfileConfig>
```

## URI Request Parameters

The request does not use any URI parameters.

## Request Body

The request accepts the following data in XML format.

### [FieldLevelEncryptionProfileConfig \(p. 182\)](#)

Root level tag for the FieldLevelEncryptionProfileConfig parameters.

Required: Yes

#### [CallerReference \(p. 182\)](#)

A unique number that ensures that the request can't be replayed.

Type: String

Required: Yes

#### [Comment \(p. 182\)](#)

An optional comment for the field-level encryption profile.

Type: String

Required: No

### [EncryptionEntities \(p. 182\)](#)

A complex data type of encryption entities for the field-level encryption profile that include the public key ID, provider, and field patterns for specifying which fields to encrypt with this key.

Type: [EncryptionEntities \(p. 241\)](#) object

Required: Yes

### [Name \(p. 182\)](#)

Profile name for the field-level encryption profile.

Type: String

Required: Yes

## Response Syntax

```
HTTP/1.1 200
<?xml version="1.0" encoding="UTF-8"?>
<FieldLevelEncryptionProfile>
  <FieldLevelEncryptionProfileConfig>
    <CallerReference>string</CallerReference>
    <Comment>string</Comment>
    <EncryptionEntities>
      <Items>
        <EncryptionEntity>
          <FieldPatterns>
            <Items>
              <FieldPattern>string</FieldPattern>
            </Items>
            <Quantity>integer</Quantity>
          </FieldPatterns>
          <ProviderId>string</ProviderId>
          <PublicKeyId>string</PublicKeyId>
        </EncryptionEntity>
      </Items>
      <Quantity>integer</Quantity>
    </EncryptionEntities>
    <Name>string</Name>
  </FieldLevelEncryptionProfileConfig>
  <Id>string</Id>
  <LastModifiedTime>timestamp</LastModifiedTime>
</FieldLevelEncryptionProfile>
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in XML format by the service.

### [FieldLevelEncryptionProfile \(p. 183\)](#)

Root level tag for the FieldLevelEncryptionProfile parameters.

Required: Yes

### [FieldLevelEncryptionProfileConfig \(p. 183\)](#)

A complex data type that includes the profile name and the encryption entities for the field-level encryption profile.

Type: [FieldLevelEncryptionProfileConfig \(p. 247\)](#) object

### **Id (p. 183)**

The ID for a field-level encryption profile configuration which includes a set of profiles that specify certain selected data fields to be encrypted by specific public keys.

Type: String

### **LastModifiedTime (p. 183)**

The last time the field-level encryption profile was updated.

Type: Timestamp

## Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 312\)](#).

### **AccessDenied**

Access denied.

HTTP Status Code: 403

### **FieldLevelEncryptionProfileAlreadyExists**

The specified profile for field-level encryption already exists.

HTTP Status Code: 409

### **FieldLevelEncryptionProfileSizeExceeded**

The maximum size of a profile for field-level encryption was exceeded.

HTTP Status Code: 400

### **IllegalUpdate**

Origin and CallerReference cannot be updated.

HTTP Status Code: 400

### **InconsistentQuantities**

The value of Quantity and the size of Items don't match.

HTTP Status Code: 400

### **InvalidArgumentException**

The argument is invalid.

HTTP Status Code: 400

### **InvalidIfMatchVersion**

The If-Match version is missing or not valid for the distribution.

HTTP Status Code: 400

### **NoSuchFieldLevelEncryptionProfile**

The specified profile for field-level encryption doesn't exist.

HTTP Status Code: 404

### NoSuchPublicKey

The specified public key doesn't exist.

HTTP Status Code: 404

### PreconditionFailed

The precondition given in one or more of the request-header fields evaluated to `false`.

HTTP Status Code: 412

### TooManyFieldLevelEncryptionEncryptionEntities

The maximum number of encryption entities for field-level encryption have been created.

HTTP Status Code: 400

### TooManyFieldLevelEncryptionFieldPatterns

The maximum number of field patterns for field-level encryption have been created.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java](#)
- [AWS SDK for JavaScript](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V2](#)

# UpdatePublicKey

Update public key information. Note that the only value you can change is the comment.

## Request Syntax

```
PUT /2019-03-26/public-key/Id/config HTTP/1.1
<?xml version="1.0" encoding="UTF-8"?>
<PublicKeyConfig xmlns="http://cloudfront.amazonaws.com/doc/2019-03-26/">
  <CallerReference>string</CallerReference>
  <Comment>string</Comment>
  <EncodedKey>string</EncodedKey>
  <Name>string</Name>
</PublicKeyConfig>
```

## URI Request Parameters

The request does not use any URI parameters.

## Request Body

The request accepts the following data in XML format.

### [PublicKeyConfig \(p. 186\)](#)

Root level tag for the PublicKeyConfig parameters.

Required: Yes

### [CallerReference \(p. 186\)](#)

A unique number that ensures that the request can't be replayed.

Type: String

Required: Yes

### [Comment \(p. 186\)](#)

An optional comment about a public key.

Type: String

Required: No

### [EncodedKey \(p. 186\)](#)

The encoded public key that you want to add to CloudFront to use with features like field-level encryption.

Type: String

Required: Yes

### [Name \(p. 186\)](#)

The name for a public key you add to CloudFront to use with features like field-level encryption.

Type: String

Required: Yes

## Response Syntax

```
HTTP/1.1 200
<?xml version="1.0" encoding="UTF-8"?>
<PublicKey>
  <CreatedTime>timestamp</CreatedTime>
  <Id>string</Id>
  <PublicKeyConfig>
    <CallerReference>string</CallerReference>
    <Comment>string</Comment>
    <EncodedKey>string</EncodedKey>
    <Name>string</Name>
  </PublicKeyConfig>
</PublicKey>
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in XML format by the service.

### [PublicKey \(p. 187\)](#)

Root level tag for the PublicKey parameters.

Required: Yes

### [CreatedTime \(p. 187\)](#)

A time you added a public key to CloudFront.

Type: Timestamp

### [Id \(p. 187\)](#)

A unique ID assigned to a public key you've added to CloudFront.

Type: String

### [PublicKeyConfig \(p. 187\)](#)

A complex data type for a public key you add to CloudFront to use with features like field-level encryption.

Type: [PublicKeyConfig \(p. 281\)](#) object

## Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 312\)](#).

### **AccessDenied**

Access denied.

HTTP Status Code: 403

### **CannotChangeImmutablePublicKeyFields**

You can't change the value of a public key.

HTTP Status Code: 400

### **IllegalUpdate**

Origin and CallerReference cannot be updated.

HTTP Status Code: 400

### **InvalidArgument**

The argument is invalid.

HTTP Status Code: 400

### **InvalidIfMatchVersion**

The If-Match version is missing or not valid for the distribution.

HTTP Status Code: 400

### **NoSuchPublicKey**

The specified public key doesn't exist.

HTTP Status Code: 404

### **PreconditionFailed**

The precondition given in one or more of the request-header fields evaluated to false.

HTTP Status Code: 412

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java](#)
- [AWS SDK for JavaScript](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V2](#)

# UpdateStreamingDistribution

Update a streaming distribution.

## Request Syntax

```
PUT /2019-03-26/streaming-distribution/Id/config HTTP/1.1
<?xml version="1.0" encoding="UTF-8"?>
<StreamingDistributionConfig xmlns="http://cloudfront.amazonaws.com/doc/2019-03-26/">
  <Aliases>
    <Items>
      <CNAME>string</CNAME>
    </Items>
    <Quantity>integer</Quantity>
  </Aliases>
  <CallerReference>string</CallerReference>
  <Comment>string</Comment>
  <Enabled>boolean</Enabled>
  <Logging>
    <Bucket>string</Bucket>
    <Enabled>boolean</Enabled>
    <Prefix>string</Prefix>
  </Logging>
  <PriceClass>string</PriceClass>
  <S3Origin>
    <DomainName>string</DomainName>
    <OriginAccessIdentity>string</OriginAccessIdentity>
  </S3Origin>
  <TrustedSigners>
    <Enabled>boolean</Enabled>
    <Items>
      <AwsAccountNumber>string</AwsAccountNumber>
    </Items>
    <Quantity>integer</Quantity>
  </TrustedSigners>
</StreamingDistributionConfig>
```

## URI Request Parameters

The request does not use any URI parameters.

## Request Body

The request accepts the following data in XML format.

### [StreamingDistributionConfig \(p. 189\)](#)

Root level tag for the StreamingDistributionConfig parameters.

Required: Yes

### [Aliases \(p. 189\)](#)

A complex type that contains information about CNAMEs (alternate domain names), if any, for this streaming distribution.

Type: [Aliases \(p. 199\)](#) object

Required: No

#### [CallerReference \(p. 189\)](#)

A unique value (for example, a date-time stamp) that ensures that the request can't be replayed.

If the value of `CallerReference` is new (regardless of the content of the `StreamingDistributionConfig` object), CloudFront creates a new distribution.

If `CallerReference` is a value that you already sent in a previous request to create a distribution, CloudFront returns a `DistributionAlreadyExists` error.

Type: String

Required: Yes

#### [Comment \(p. 189\)](#)

Any comments you want to include about the streaming distribution.

Type: String

Required: Yes

#### [Enabled \(p. 189\)](#)

Whether the streaming distribution is enabled to accept user requests for content.

Type: Boolean

Required: Yes

#### [Logging \(p. 189\)](#)

A complex type that controls whether access logs are written for the streaming distribution.

Type: [StreamingLoggingConfig \(p. 302\)](#) object

Required: No

#### [PriceClass \(p. 189\)](#)

A complex type that contains information about price class for this streaming distribution.

Type: String

Valid Values: `PriceClass_100` | `PriceClass_200` | `PriceClass_All`

Required: No

#### [S3Origin \(p. 189\)](#)

A complex type that contains information about the Amazon S3 bucket from which you want CloudFront to get your media files for distribution.

Type: [S3Origin \(p. 289\)](#) object

Required: Yes

#### [TrustedSigners \(p. 189\)](#)

A complex type that specifies any AWS accounts that you want to permit to create signed URLs for private content. If you want the distribution to use signed URLs, include this element; if you want

the distribution to use public URLs, remove this element. For more information, see [Serving Private Content through CloudFront](#) in the *Amazon CloudFront Developer Guide*.

Type: [TrustedSigners](#) (p. 306) object

Required: Yes

## Response Syntax

```
HTTP/1.1 200
<?xml version="1.0" encoding="UTF-8"?>
<StreamingDistribution>
  <ActiveTrustedSigners>
    <Enabled>boolean</Enabled>
    <Items>
      <Signer>
        <AwsAccountNumber>string</AwsAccountNumber>
        <KeyPairIds>
          <Items>
            <KeyId>string</KeyId>
          </Items>
          <Quantity>integer</Quantity>
        </KeyPairIds>
      </Signer>
    </Items>
    <Quantity>integer</Quantity>
  </ActiveTrustedSigners>
  <ARN>string</ARN>
  <DomainName>string</DomainName>
  <Id>string</Id>
  <LastModifiedTime>timestamp</LastModifiedTime>
  <Status>string</Status>
  <StreamingDistributionConfig>
    <Aliases>
      <Items>
        <CNAME>string</CNAME>
      </Items>
      <Quantity>integer</Quantity>
    </Aliases>
    <CallerReference>string</CallerReference>
    <Comment>string</Comment>
    <Enabled>boolean</Enabled>
    <Logging>
      <Bucket>string</Bucket>
      <Enabled>boolean</Enabled>
      <Prefix>string</Prefix>
    </Logging>
    <PriceClass>string</PriceClass>
    <S3Origin>
      <DomainName>string</DomainName>
      <OriginAccessIdentity>string</OriginAccessIdentity>
    </S3Origin>
    <TrustedSigners>
      <Enabled>boolean</Enabled>
      <Items>
        <AwsAccountNumber>string</AwsAccountNumber>
      </Items>
      <Quantity>integer</Quantity>
    </TrustedSigners>
  </StreamingDistributionConfig>
</StreamingDistribution>
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in XML format by the service.

### [StreamingDistribution \(p. 191\)](#)

Root level tag for the StreamingDistribution parameters.

Required: Yes

### [ActiveTrustedSigners \(p. 191\)](#)

A complex type that lists the AWS accounts, if any, that you included in the TrustedSigners complex type for this distribution. These are the accounts that you want to allow to create signed URLs for private content.

The Signer complex type lists the AWS account number of the trusted signer or self if the signer is the AWS account that created the distribution. The Signer element also includes the IDs of any active CloudFront key pairs that are associated with the trusted signer's AWS account. If no KeyPairId element appears for a Signer, that signer can't create signed URLs.

For more information, see [Serving Private Content through CloudFront](#) in the *Amazon CloudFront Developer Guide*.

Type: [ActiveTrustedSigners \(p. 198\)](#) object

### [ARN \(p. 191\)](#)

The ARN (Amazon Resource Name) for the distribution. For example:

`arn:aws:cloudfront::123456789012:distribution/EDFDVBD632BHDS5`, where 123456789012 is your AWS account ID.

Type: String

### [DomainName \(p. 191\)](#)

The domain name that corresponds to the streaming distribution, for example, `s5c39gqb8ow64r.cloudfront.net`.

Type: String

### [Id \(p. 191\)](#)

The identifier for the RTMP distribution. For example: `EGTXBD79EXAMPLE`.

Type: String

### [LastModifiedTime \(p. 191\)](#)

The date and time that the distribution was last modified.

Type: Timestamp

### [Status \(p. 191\)](#)

The current status of the RTMP distribution. When the status is Deployed, the distribution's information is propagated to all CloudFront edge locations.

Type: String

### [StreamingDistributionConfig \(p. 191\)](#)

The current configuration information for the RTMP distribution.

Type: [StreamingDistributionConfig \(p. 295\)](#) object

## Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 312\)](#).

### **AccessDenied**

Access denied.

HTTP Status Code: 403

### **CNAMEAlreadyExists**

The CNAME specified is already defined for CloudFront.

HTTP Status Code: 409

### **IllegalUpdate**

Origin and `CallerReference` cannot be updated.

HTTP Status Code: 400

### **InconsistentQuantities**

The value of `Quantity` and the size of `Items` don't match.

HTTP Status Code: 400

### **InvalidArgumentException**

The argument is invalid.

HTTP Status Code: 400

### **InvalidIfMatchVersion**

The `If-Match` version is missing or not valid for the distribution.

HTTP Status Code: 400

### **InvalidOriginAccessIdentity**

The origin access identity is not valid or doesn't exist.

HTTP Status Code: 400

### **MissingBody**

This operation requires a body. Ensure that the body is present and the `Content-Type` header is set.

HTTP Status Code: 400

### **NoSuchStreamingDistribution**

The specified streaming distribution does not exist.

HTTP Status Code: 404

### **PreconditionFailed**

The precondition given in one or more of the request-header fields evaluated to `false`.

HTTP Status Code: 412

### **TooManyStreamingDistributionCNAMEs**

Your request contains more CNAMEs than are allowed per distribution.

HTTP Status Code: 400

### **TooManyTrustedSigners**

Your request contains more trusted signers than are allowed per distribution.

HTTP Status Code: 400

### **TrustedSignerDoesNotExist**

One or more of your trusted signers don't exist.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java](#)
- [AWS SDK for JavaScript](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V2](#)

# Data Types

The Amazon CloudFront API contains several data types that various actions use. This section describes each data type in detail.

## Note

The order of each element in a data type structure is not guaranteed. Applications should not assume a particular order.

The following data types are supported:

- [ActiveTrustedSigners \(p. 198\)](#)
- [Aliases \(p. 199\)](#)
- [AliasICPRecordal \(p. 200\)](#)
- [AllowedMethods \(p. 201\)](#)
- [CacheBehavior \(p. 203\)](#)
- [CacheBehaviors \(p. 207\)](#)
- [CachedMethods \(p. 208\)](#)
- [CloudFrontOriginAccessIdentity \(p. 209\)](#)
- [CloudFrontOriginAccessIdentityConfig \(p. 210\)](#)
- [CloudFrontOriginAccessIdentityList \(p. 211\)](#)
- [CloudFrontOriginAccessIdentitySummary \(p. 213\)](#)
- [ContentTypeProfile \(p. 214\)](#)
- [ContentTypeProfileConfig \(p. 215\)](#)
- [ContentTypeProfiles \(p. 216\)](#)
- [CookieNames \(p. 217\)](#)
- [CookiePreference \(p. 218\)](#)
- [CustomErrorResponse \(p. 219\)](#)
- [CustomErrorResponses \(p. 221\)](#)
- [CustomHeaders \(p. 222\)](#)
- [CustomOriginConfig \(p. 223\)](#)
- [DefaultCacheBehavior \(p. 225\)](#)
- [Distribution \(p. 228\)](#)
- [DistributionConfig \(p. 230\)](#)
- [DistributionConfigWithTags \(p. 234\)](#)
- [DistributionList \(p. 235\)](#)
- [DistributionSummary \(p. 237\)](#)
- [EncryptionEntities \(p. 241\)](#)
- [EncryptionEntity \(p. 242\)](#)
- [FieldLevelEncryption \(p. 243\)](#)
- [FieldLevelEncryptionConfig \(p. 244\)](#)
- [FieldLevelEncryptionList \(p. 245\)](#)
- [FieldLevelEncryptionProfile \(p. 246\)](#)
- [FieldLevelEncryptionProfileConfig \(p. 247\)](#)
- [FieldLevelEncryptionProfileList \(p. 248\)](#)
- [FieldLevelEncryptionProfileSummary \(p. 249\)](#)

- [FieldLevelEncryptionSummary \(p. 250\)](#)
- [FieldPatterns \(p. 251\)](#)
- [ForwardedValues \(p. 252\)](#)
- [GeoRestriction \(p. 254\)](#)
- [Headers \(p. 256\)](#)
- [Invalidation \(p. 258\)](#)
- [InvalidationBatch \(p. 259\)](#)
- [InvalidationList \(p. 260\)](#)
- [InvalidationSummary \(p. 262\)](#)
- [KeyPairIds \(p. 263\)](#)
- [LambdaFunctionAssociation \(p. 264\)](#)
- [LambdaFunctionAssociations \(p. 266\)](#)
- [LoggingConfig \(p. 267\)](#)
- [Origin \(p. 269\)](#)
- [OriginCustomHeader \(p. 271\)](#)
- [OriginGroup \(p. 272\)](#)
- [OriginGroupFailoverCriteria \(p. 273\)](#)
- [OriginGroupMember \(p. 274\)](#)
- [OriginGroupMembers \(p. 275\)](#)
- [OriginGroups \(p. 276\)](#)
- [Origins \(p. 277\)](#)
- [OriginSslProtocols \(p. 278\)](#)
- [Paths \(p. 279\)](#)
- [PublicKey \(p. 280\)](#)
- [PublicKeyConfig \(p. 281\)](#)
- [PublicKeyList \(p. 282\)](#)
- [PublicKeySummary \(p. 283\)](#)
- [QueryArgProfile \(p. 284\)](#)
- [QueryArgProfileConfig \(p. 285\)](#)
- [QueryArgProfiles \(p. 286\)](#)
- [QueryStringCacheKeys \(p. 287\)](#)
- [Restrictions \(p. 288\)](#)
- [S3Origin \(p. 289\)](#)
- [S3OriginConfig \(p. 290\)](#)
- [Signer \(p. 291\)](#)
- [StatusCodes \(p. 292\)](#)
- [StreamingDistribution \(p. 293\)](#)
- [StreamingDistributionConfig \(p. 295\)](#)
- [StreamingDistributionConfigWithTags \(p. 297\)](#)
- [StreamingDistributionList \(p. 298\)](#)
- [StreamingDistributionSummary \(p. 300\)](#)
- [StreamingLoggingConfig \(p. 302\)](#)
- [Tag \(p. 303\)](#)
- [TagKeys \(p. 304\)](#)
- [Tags \(p. 305\)](#)
- [TrustedSigners \(p. 306\)](#)

- [ViewerCertificate \(p. 307\)](#)

# ActiveTrustedSigners

A complex type that lists the AWS accounts, if any, that you included in the `TrustedSigners` complex type for this distribution. These are the accounts that you want to allow to create signed URLs for private content.

The `Signer` complex type lists the AWS account number of the trusted signer or `self` if the signer is the AWS account that created the distribution. The `Signer` element also includes the IDs of any active CloudFront key pairs that are associated with the trusted signer's AWS account. If no `KeyPairId` element appears for a `Signer`, that signer can't create signed URLs.

For more information, see [Serving Private Content through CloudFront](#) in the *Amazon CloudFront Developer Guide*.

## Contents

### Enabled

`Enabled` is `true` if any of the AWS accounts listed in the `TrustedSigners` complex type for this distribution have active CloudFront key pairs. If not, `Enabled` is `false`.

Type: Boolean

Required: Yes

### Items

A complex type that contains one `Signer` complex type for each trusted signer that is specified in the `TrustedSigners` complex type.

Type: Array of [Signer \(p. 291\)](#) objects

Required: No

### Quantity

The number of trusted signers specified in the `TrustedSigners` complex type.

Type: Integer

Required: Yes

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java](#)
- [AWS SDK for Ruby V2](#)

# Aliases

A complex type that contains information about CNAMEs (alternate domain names), if any, for this distribution.

## Contents

### Items

A complex type that contains the CNAME aliases, if any, that you want to associate with this distribution.

Type: Array of strings

Required: No

### Quantity

The number of CNAME aliases, if any, that you want to associate with this distribution.

Type: Integer

Required: Yes

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java](#)
- [AWS SDK for Ruby V2](#)

# AliasICPRecordal

AWS services in China customers must file for an Internet Content Provider (ICP) recordal if they want to serve content publicly on an alternate domain name, also known as a CNAME, that they've added to CloudFront. AliasICPRecordal provides the ICP recordal status for CNAMEs associated with distributions. The status is returned in the CloudFront response; you can't configure it yourself.

For more information about ICP recordals, see [Signup, Accounts, and Credentials](#) in *Getting Started with AWS services in China*.

## Contents

### CNAME

A domain name associated with a distribution.

Type: String

Required: No

### ICPRecordalStatus

The Internet Content Provider (ICP) recordal status for a CNAME. The ICPRecordalStatus is set to APPROVED for all CNAMEs (aliases) in regions outside of China.

The status values returned are the following:

- **APPROVED** indicates that the associated CNAME has a valid ICP recordal number. Multiple CNAMEs can be associated with a distribution, and CNAMEs can correspond to different ICP recordals. To be marked as APPROVED, that is, valid to use with China region, a CNAME must have one ICP recordal number associated with it.
- **SUSPENDED** indicates that the associated CNAME does not have a valid ICP recordal number.
- **PENDING** indicates that CloudFront can't determine the ICP recordal status of the CNAME associated with the distribution because there was an error in trying to determine the status. You can try again to see if the error is resolved in which case CloudFront returns an APPROVED or SUSPENDED status.

Type: String

Valid Values: APPROVED | SUSPENDED | PENDING

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java](#)
- [AWS SDK for Ruby V2](#)

# AllowedMethods

A complex type that controls which HTTP methods CloudFront processes and forwards to your Amazon S3 bucket or your custom origin. There are three choices:

- CloudFront forwards only `GET` and `HEAD` requests.
- CloudFront forwards only `GET`, `HEAD`, and `OPTIONS` requests.
- CloudFront forwards `GET`, `HEAD`, `OPTIONS`, `PUT`, `PATCH`, `POST`, and `DELETE` requests.

If you pick the third choice, you may need to restrict access to your Amazon S3 bucket or to your custom origin so users can't perform operations that you don't want them to. For example, you might not want users to have permissions to delete objects from your origin.

## Contents

### CachedMethods

A complex type that controls whether CloudFront caches the response to requests using the specified HTTP methods. There are two choices:

- CloudFront caches responses to `GET` and `HEAD` requests.
- CloudFront caches responses to `GET`, `HEAD`, and `OPTIONS` requests.

If you pick the second choice for your Amazon S3 Origin, you may need to forward Access-Control-Request-Method, Access-Control-Request-Headers, and Origin headers for the responses to be cached correctly.

Type: [CachedMethods \(p. 208\)](#) object

Required: No

### Items

A complex type that contains the HTTP methods that you want CloudFront to process and forward to your origin.

Type: Array of strings

Valid Values: `GET` | `HEAD` | `POST` | `PUT` | `PATCH` | `OPTIONS` | `DELETE`

Required: Yes

### Quantity

The number of HTTP methods that you want CloudFront to forward to your origin. Valid values are 2 (for `GET` and `HEAD` requests), 3 (for `GET`, `HEAD`, and `OPTIONS` requests) and 7 (for `GET`, `HEAD`, `OPTIONS`, `PUT`, `PATCH`, `POST`, and `DELETE` requests).

Type: Integer

Required: Yes

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)

- [AWS SDK for Go](#)
- [AWS SDK for Java](#)
- [AWS SDK for Ruby V2](#)

# CacheBehavior

A complex type that describes how CloudFront processes requests.

You must create at least as many cache behaviors (including the default cache behavior) as you have origins if you want CloudFront to distribute objects from all of the origins. Each cache behavior specifies the one origin from which you want CloudFront to get objects. If you have two origins and only the default cache behavior, the default cache behavior will cause CloudFront to get objects from one of the origins, but the other origin is never used.

For the current limit on the number of cache behaviors that you can add to a distribution, see [Amazon CloudFront Limits](#) in the *AWS General Reference*.

If you don't want to specify any cache behaviors, include only an empty `CacheBehaviors` element. Don't include an empty `CacheBehavior` element, or CloudFront returns a `MalformedXML` error.

To delete all cache behaviors in an existing distribution, update the distribution configuration and include only an empty `CacheBehaviors` element.

To add, change, or remove one or more cache behaviors, update the distribution configuration and specify all of the cache behaviors that you want to include in the updated distribution.

For more information about cache behaviors, see [Cache Behaviors](#) in the *Amazon CloudFront Developer Guide*.

## Contents

### AllowedMethods

A complex type that controls which HTTP methods CloudFront processes and forwards to your Amazon S3 bucket or your custom origin. There are three choices:

- CloudFront forwards only `GET` and `HEAD` requests.
- CloudFront forwards only `GET`, `HEAD`, and `OPTIONS` requests.
- CloudFront forwards `GET`, `HEAD`, `OPTIONS`, `PUT`, `PATCH`, `POST`, and `DELETE` requests.

If you pick the third choice, you may need to restrict access to your Amazon S3 bucket or to your custom origin so users can't perform operations that you don't want them to. For example, you might not want users to have permissions to delete objects from your origin.

Type: [AllowedMethods](#) (p. 201) object

Required: No

### Compress

Whether you want CloudFront to automatically compress certain files for this cache behavior. If so, specify `true`; if not, specify `false`. For more information, see [Serving Compressed Files](#) in the *Amazon CloudFront Developer Guide*.

Type: Boolean

Required: No

### DefaultTTL

The default amount of time that you want objects to stay in CloudFront caches before CloudFront forwards another request to your origin to determine whether the object has been updated. The value that you specify applies only when your origin does not add HTTP headers such as `Cache-Control max-age`, `Cache-Control s-maxage`, and `Expires` to objects. For more information,

see [Managing How Long Content Stays in an Edge Cache \(Expiration\)](#) in the *Amazon CloudFront Developer Guide*.

Type: Long

Required: No

**FieldLevelEncryptionId**

The value of ID for the field-level encryption configuration that you want CloudFront to use for encrypting specific fields of data for a cache behavior or for the default cache behavior in your distribution.

Type: String

Required: No

**ForwardedValues**

A complex type that specifies how CloudFront handles query strings and cookies.

Type: [ForwardedValues \(p. 252\)](#) object

Required: Yes

**LambdaFunctionAssociations**

A complex type that contains zero or more Lambda function associations for a cache behavior.

Type: [LambdaFunctionAssociations \(p. 266\)](#) object

Required: No

**MaxTTL**

The maximum amount of time that you want objects to stay in CloudFront caches before CloudFront forwards another request to your origin to determine whether the object has been updated.

The value that you specify applies only when your origin adds HTTP headers such as Cache-Control max-age, Cache-Control s-maxage, and Expires to objects. For more information, see [Managing How Long Content Stays in an Edge Cache \(Expiration\)](#) in the *Amazon CloudFront Developer Guide*.

Type: Long

Required: No

**MinTTL**

The minimum amount of time that you want objects to stay in CloudFront caches before CloudFront forwards another request to your origin to determine whether the object has been updated. For more information, see [Managing How Long Content Stays in an Edge Cache \(Expiration\)](#) in the *Amazon CloudFront Developer Guide*.

You must specify 0 for MinTTL if you configure CloudFront to forward all headers to your origin (under Headers, if you specify 1 for Quantity and \* for Name).

Type: Long

Required: Yes

**PathPattern**

The pattern (for example, images/\* .jpg) that specifies which requests to apply the behavior to. When CloudFront receives a viewer request, the requested path is compared with path patterns in the order in which cache behaviors are listed in the distribution.

**Note**

You can optionally include a slash (/) at the beginning of the path pattern. For example, /images/\*.jpg. CloudFront behavior is the same with or without the leading /.

The path pattern for the default cache behavior is \* and cannot be changed. If the request for an object does not match the path pattern for any cache behaviors, CloudFront applies the behavior in the default cache behavior.

For more information, see [Path Pattern](#) in the *Amazon CloudFront Developer Guide*.

Type: String

Required: Yes

**SmoothStreaming**

Indicates whether you want to distribute media files in the Microsoft Smooth Streaming format using the origin that is associated with this cache behavior. If so, specify true; if not, specify false. If you specify true for SmoothStreaming, you can still distribute other content using this cache behavior if the content matches the value of PathPattern.

Type: Boolean

Required: No

**TargetOriginId**

The value of ID for the origin that you want CloudFront to route requests to when a request matches the path pattern either for a cache behavior or for the default cache behavior in your distribution.

Type: String

Required: Yes

**TrustedSigners**

A complex type that specifies the AWS accounts, if any, that you want to allow to create signed URLs for private content.

If you want to require signed URLs in requests for objects in the target origin that match the PathPattern for this cache behavior, specify true for Enabled, and specify the applicable values for Quantity and Items. For more information, see [Serving Private Content through CloudFront](#) in the *Amazon CloudFront Developer Guide*.

If you don't want to require signed URLs in requests for objects that match PathPattern, specify false for Enabled and 0 for Quantity. Omit Items.

To add, change, or remove one or more trusted signers, change Enabled to true (if it's currently false), change Quantity as applicable, and specify all of the trusted signers that you want to include in the updated distribution.

Type: [TrustedSigners \(p. 306\)](#) object

Required: Yes

**ViewerProtocolPolicy**

The protocol that viewers can use to access the files in the origin specified by TargetOriginId when a request matches the path pattern in PathPattern. You can specify the following options:

- **allow-all**: Viewers can use HTTP or HTTPS.
- **redirect-to-https**: If a viewer submits an HTTP request, CloudFront returns an HTTP status code of 301 (Moved Permanently) to the viewer along with the HTTPS URL. The viewer then resubmits the request using the new URL.

- **https-only:** If a viewer sends an HTTP request, CloudFront returns an HTTP status code of 403 (Forbidden).

For more information about requiring the HTTPS protocol, see [Using an HTTPS Connection to Access Your Objects](#) in the *Amazon CloudFront Developer Guide*.

**Note**

The only way to guarantee that viewers retrieve an object that was fetched from the origin using HTTPS is never to use any other protocol to fetch the object. If you have recently changed from HTTP to HTTPS, we recommend that you clear your objects' cache because cached objects are protocol agnostic. That means that an edge location will return an object from the cache regardless of whether the current request protocol matches the protocol used previously. For more information, see [Managing How Long Content Stays in an Edge Cache \(Expiration\)](#) in the *Amazon CloudFront Developer Guide*.

Type: String

Valid Values: `allow-all` | `https-only` | `redirect-to-https`

Required: Yes

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java](#)
- [AWS SDK for Ruby V2](#)

# CacheBehaviors

A complex type that contains zero or more CacheBehavior elements.

## Contents

### Items

Optional: A complex type that contains cache behaviors for this distribution. If `Quantity` is 0, you can omit `Items`.

Type: Array of [CacheBehavior \(p. 203\)](#) objects

Required: No

### Quantity

The number of cache behaviors for this distribution.

Type: Integer

Required: Yes

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java](#)
- [AWS SDK for Ruby V2](#)

# CachedMethods

A complex type that controls whether CloudFront caches the response to requests using the specified HTTP methods. There are two choices:

- CloudFront caches responses to `GET` and `HEAD` requests.
- CloudFront caches responses to `GET`, `HEAD`, and `OPTIONS` requests.

If you pick the second choice for your Amazon S3 Origin, you may need to forward `Access-Control-Request-Method`, `Access-Control-Request-Headers`, and `Origin` headers for the responses to be cached correctly.

## Contents

### Items

A complex type that contains the HTTP methods that you want CloudFront to cache responses to.

Type: Array of strings

Valid Values: `GET` | `HEAD` | `POST` | `PUT` | `PATCH` | `OPTIONS` | `DELETE`

Required: Yes

### Quantity

The number of HTTP methods for which you want CloudFront to cache responses. Valid values are 2 (for caching responses to `GET` and `HEAD` requests) and 3 (for caching responses to `GET`, `HEAD`, and `OPTIONS` requests).

Type: Integer

Required: Yes

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java](#)
- [AWS SDK for Ruby V2](#)

# CloudFrontOriginAccessIdentity

CloudFront origin access identity.

## Contents

### CloudFrontOriginAccessIdentityConfig

The current configuration information for the identity.

Type: [CloudFrontOriginAccessIdentityConfig \(p. 210\)](#) object

Required: No

#### Id

The ID for the origin access identity, for example, E74FTE3AJFJ256A.

Type: String

Required: Yes

#### S3CanonicalUserId

The Amazon S3 canonical user ID for the origin access identity, used when giving the origin access identity read permission to an object in Amazon S3.

Type: String

Required: Yes

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java](#)
- [AWS SDK for Ruby V2](#)

# CloudFrontOriginAccessIdentityConfig

Origin access identity configuration. Send a `GET` request to the `/CloudFront API version/CloudFront/identity ID/config` resource.

## Contents

### CallerReference

A unique value (for example, a date-time stamp) that ensures that the request can't be replayed.

If the value of `CallerReference` is new (regardless of the content of the `CloudFrontOriginAccessIdentityConfig` object), a new origin access identity is created.

If the `CallerReference` is a value already sent in a previous identity request, and the content of the `CloudFrontOriginAccessIdentityConfig` is identical to the original request (ignoring white space), the response includes the same information returned to the original request.

If the `CallerReference` is a value you already sent in a previous request to create an identity, but the content of the `CloudFrontOriginAccessIdentityConfig` is different from the original request, CloudFront returns a `CloudFrontOriginAccessIdentityAlreadyExists` error.

Type: String

Required: Yes

### Comment

Any comments you want to include about the origin access identity.

Type: String

Required: Yes

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java](#)
- [AWS SDK for Ruby V2](#)

# CloudFrontOriginAccessIdentityList

Lists the origin access identities for CloudFront. Send a `GET` request to the `/CloudFront API version/origin-access-identity/cloudfront` resource. The response includes a `CloudFrontOriginAccessIdentityList` element with zero or more `CloudFrontOriginAccessIdentitySummary` child elements. By default, your entire list of origin access identities is returned in one single page. If the list is long, you can paginate it using the `MaxItems` and `Marker` parameters.

## Contents

### **IsTruncated**

A flag that indicates whether more origin access identities remain to be listed. If your results were truncated, you can make a follow-up pagination request using the `Marker` request parameter to retrieve more items in the list.

Type: Boolean

Required: Yes

### **Items**

A complex type that contains one `CloudFrontOriginAccessIdentitySummary` element for each origin access identity that was created by the current AWS account.

Type: Array of [CloudFrontOriginAccessIdentitySummary \(p. 213\)](#) objects

Required: No

### **Marker**

Use this when paginating results to indicate where to begin in your list of origin access identities. The results include identities in the list that occur after the marker. To get the next page of results, set the `Marker` to the value of the `NextMarker` from the current page's response (which is also the ID of the last identity on that page).

Type: String

Required: Yes

### **MaxItems**

The maximum number of origin access identities you want in the response body.

Type: Integer

Required: Yes

### **NextMarker**

If `IsTruncated` is `true`, this element is present and contains the value you can use for the `Marker` request parameter to continue listing your origin access identities where they left off.

Type: String

Required: No

### **Quantity**

The number of CloudFront origin access identities that were created by the current AWS account.

Type: Integer

Required: Yes

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java](#)
- [AWS SDK for Ruby V2](#)

# CloudFrontOriginAccessIdentitySummary

Summary of the information about a CloudFront origin access identity.

## Contents

### Comment

The comment for this origin access identity, as originally specified when created.

Type: String

Required: Yes

### Id

The ID for the origin access identity. For example: E74FTE3AJFJ256A.

Type: String

Required: Yes

### S3CanonicalUserId

The Amazon S3 canonical user ID for the origin access identity, which you use when giving the origin access identity read permission to an object in Amazon S3.

Type: String

Required: Yes

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java](#)
- [AWS SDK for Ruby V2](#)

# ContentTypeProfile

A field-level encryption content type profile.

## Contents

### **ContentType**

The content type for a field-level encryption content type-profile mapping.

Type: String

Required: Yes

### **Format**

The format for a field-level encryption content type-profile mapping.

Type: String

Valid Values: URLEncoded

Required: Yes

### **ProfileId**

The profile ID for a field-level encryption content type-profile mapping.

Type: String

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java](#)
- [AWS SDK for Ruby V2](#)

# ContentTypeProfileConfig

The configuration for a field-level encryption content type-profile mapping.

## Contents

### ContentTypeProfiles

The configuration for a field-level encryption content type-profile.

Type: [ContentTypeProfiles \(p. 216\)](#) object

Required: No

### ForwardWhenContentTypeIsUnknown

The setting in a field-level encryption content type-profile mapping that specifies what to do when an unknown content type is provided for the profile. If true, content is forwarded without being encrypted when the content type is unknown. If false (the default), an error is returned when the content type is unknown.

Type: Boolean

Required: Yes

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java](#)
- [AWS SDK for Ruby V2](#)

# ContentTypeProfiles

Field-level encryption content type-profile.

## Contents

### Items

Items in a field-level encryption content type-profile mapping.

Type: Array of [ContentTypeProfile \(p. 214\)](#) objects

Required: No

### Quantity

The number of field-level encryption content type-profile mappings.

Type: Integer

Required: Yes

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java](#)
- [AWS SDK for Ruby V2](#)

# CookieNames

A complex type that specifies whether you want CloudFront to forward cookies to the origin and, if so, which ones. For more information about forwarding cookies to the origin, see [Caching Content Based on Request Headers](#) in the *Amazon CloudFront Developer Guide*.

## Contents

### Items

A complex type that contains one `Name` element for each cookie that you want CloudFront to forward to the origin for this cache behavior.

Type: Array of strings

Required: No

### Quantity

The number of different cookies that you want CloudFront to forward to the origin for this cache behavior.

Type: Integer

Required: Yes

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java](#)
- [AWS SDK for Ruby V2](#)

# CookiePreference

A complex type that specifies whether you want CloudFront to forward cookies to the origin and, if so, which ones. For more information about forwarding cookies to the origin, see [Caching Content Based on Cookies](#) in the *Amazon CloudFront Developer Guide*.

## Contents

### Forward

Specifies which cookies to forward to the origin for this cache behavior: all, none, or the list of cookies specified in the `WhitelistedNames` complex type.

Amazon S3 doesn't process cookies. When the cache behavior is forwarding requests to an Amazon S3 origin, specify none for the `Forward` element.

Type: String

Valid Values: `none` | `whitelist` | `all`

Required: Yes

### WhitelistedNames

Required if you specify `whitelist` for the value of `Forward`. A complex type that specifies how many different cookies you want CloudFront to forward to the origin for this cache behavior and, if you want to forward selected cookies, the names of those cookies.

If you specify `all` or `none` for the value of `Forward`, omit `WhitelistedNames`. If you change the value of `Forward` from `whitelist` to `all` or `none` and you don't delete the `WhitelistedNames` element and its child elements, CloudFront deletes them automatically.

For the current limit on the number of cookie names that you can whitelist for each cache behavior, see [CloudFront Limits](#) in the *AWS General Reference*.

Type: [CookieNames \(p. 217\)](#) object

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java](#)
- [AWS SDK for Ruby V2](#)

# CustomErrorResponse

A complex type that controls:

- Whether CloudFront replaces HTTP status codes in the 4xx and 5xx range with custom error messages before returning the response to the viewer.
- How long CloudFront caches HTTP status codes in the 4xx and 5xx range.

For more information about custom error pages, see [Customizing Error Responses](#) in the *Amazon CloudFront Developer Guide*.

## Contents

### ErrorCachingMinTTL

The minimum amount of time, in seconds, that you want CloudFront to cache the HTTP status code specified in `ErrorCode`. When this time period has elapsed, CloudFront queries your origin to see whether the problem that caused the error has been resolved and the requested object is now available.

If you don't want to specify a value, include an empty element, `<ErrorCachingMinTTL>`, in the XML document.

For more information, see [Customizing Error Responses](#) in the *Amazon CloudFront Developer Guide*.

Type: Long

Required: No

### ErrorCode

The HTTP status code for which you want to specify a custom error page and/or a caching duration.

Type: Integer

Required: Yes

### ResponseCode

The HTTP status code that you want CloudFront to return to the viewer along with the custom error page. There are a variety of reasons that you might want CloudFront to return a status code different from the status code that your origin returned to CloudFront, for example:

- Some Internet devices (some firewalls and corporate proxies, for example) intercept HTTP 4xx and 5xx and prevent the response from being returned to the viewer. If you substitute 200, the response typically won't be intercepted.
- If you don't care about distinguishing among different client errors or server errors, you can specify 400 or 500 as the `ResponseCode` for all 4xx or 5xx errors.
- You might want to return a 200 status code (OK) and static website so your customers don't know that your website is down.

If you specify a value for `ResponseCode`, you must also specify a value for `ResponsePagePath`. If you don't want to specify a value, include an empty element, `<ResponseCode>`, in the XML document.

Type: String

Required: No

### ResponsePagePath

The path to the custom error page that you want CloudFront to return to a viewer when your origin returns the HTTP status code specified by `ErrorCode`, for example, `/4xx-errors/403-forbidden.html`. If you want to store your objects and your custom error pages in different locations, your distribution must include a cache behavior for which the following is true:

- The value of `PathPattern` matches the path to your custom error messages. For example, suppose you saved custom error pages for 4xx errors in an Amazon S3 bucket in a directory named `/4xx-errors`. Your distribution must include a cache behavior for which the path pattern routes requests for your custom error pages to that location, for example, `/4xx-errors/*`.
- The value of `TargetOriginId` specifies the value of the `ID` element for the origin that contains your custom error pages.

If you specify a value for `ResponsePagePath`, you must also specify a value for `ResponseCode`. If you don't want to specify a value, include an empty element, `<ResponsePagePath>`, in the XML document.

We recommend that you store custom error pages in an Amazon S3 bucket. If you store custom error pages on an HTTP server and the server starts to return 5xx errors, CloudFront can't get the files that you want to return to viewers because the origin server is unavailable.

Type: String

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java](#)
- [AWS SDK for Ruby V2](#)

# CustomErrorResponses

A complex type that controls:

- Whether CloudFront replaces HTTP status codes in the 4xx and 5xx range with custom error messages before returning the response to the viewer.
- How long CloudFront caches HTTP status codes in the 4xx and 5xx range.

For more information about custom error pages, see [Customizing Error Responses](#) in the *Amazon CloudFront Developer Guide*.

## Contents

### Items

A complex type that contains a `CustomErrorResponse` element for each HTTP status code for which you want to specify a custom error page and/or a caching duration.

Type: Array of [CustomErrorResponse](#) (p. 219) objects

Required: No

### Quantity

The number of HTTP status codes for which you want to specify a custom error page and/or a caching duration. If `Quantity` is 0, you can omit `Items`.

Type: Integer

Required: Yes

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java](#)
- [AWS SDK for Ruby V2](#)

# CustomHeaders

A complex type that contains the list of Custom Headers for each origin.

## Contents

### Items

**Optional:** A list that contains one `OriginCustomHeader` element for each custom header that you want CloudFront to forward to the origin. If `Quantity` is 0, omit `Items`.

Type: Array of [OriginCustomHeader \(p. 271\)](#) objects

Required: No

### Quantity

The number of custom headers, if any, for this distribution.

Type: Integer

Required: Yes

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java](#)
- [AWS SDK for Ruby V2](#)

# CustomOriginConfig

A custom origin or an Amazon S3 bucket configured as a website endpoint.

## Contents

### HTTPPort

The HTTP port the custom origin listens on.

Type: Integer

Required: Yes

### HTTPSPort

The HTTPS port the custom origin listens on.

Type: Integer

Required: Yes

### OriginKeepaliveTimeout

You can create a custom keep-alive timeout. All timeout units are in seconds. The default keep-alive timeout is 5 seconds, but you can configure custom timeout lengths using the CloudFront API. The minimum timeout length is 1 second; the maximum is 60 seconds.

If you need to increase the maximum time limit, contact the [AWS Support Center](#).

Type: Integer

Required: No

### OriginProtocolPolicy

The origin protocol policy to apply to your origin.

Type: String

Valid Values: `http-only` | `match-viewer` | `https-only`

Required: Yes

### OriginReadTimeout

You can create a custom origin read timeout. All timeout units are in seconds. The default origin read timeout is 30 seconds, but you can configure custom timeout lengths using the CloudFront API. The minimum timeout length is 4 seconds; the maximum is 60 seconds.

If you need to increase the maximum time limit, contact the [AWS Support Center](#).

Type: Integer

Required: No

### OriginSslProtocols

The SSL/TLS protocols that you want CloudFront to use when communicating with your origin over HTTPS.

Type: [OriginSslProtocols \(p. 278\)](#) object

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java](#)
- [AWS SDK for Ruby V2](#)

# DefaultCacheBehavior

A complex type that describes the default cache behavior if you don't specify a `CacheBehavior` element or if files don't match any of the values of `PathPattern` in `CacheBehavior` elements. You must create exactly one default cache behavior.

## Contents

### AllowedMethods

A complex type that controls which HTTP methods CloudFront processes and forwards to your Amazon S3 bucket or your custom origin. There are three choices:

- CloudFront forwards only `GET` and `HEAD` requests.
- CloudFront forwards only `GET`, `HEAD`, and `OPTIONS` requests.
- CloudFront forwards `GET`, `HEAD`, `OPTIONS`, `PUT`, `PATCH`, `POST`, and `DELETE` requests.

If you pick the third choice, you may need to restrict access to your Amazon S3 bucket or to your custom origin so users can't perform operations that you don't want them to. For example, you might not want users to have permissions to delete objects from your origin.

Type: [AllowedMethods \(p. 201\)](#) object

Required: No

### Compress

Whether you want CloudFront to automatically compress certain files for this cache behavior. If so, specify `true`; if not, specify `false`. For more information, see [Serving Compressed Files](#) in the *Amazon CloudFront Developer Guide*.

Type: Boolean

Required: No

### DefaultTTL

The default amount of time that you want objects to stay in CloudFront caches before CloudFront forwards another request to your origin to determine whether the object has been updated. The value that you specify applies only when your origin does not add HTTP headers such as `Cache-Control max-age`, `Cache-Control s-maxage`, and `Expires` to objects. For more information, see [Managing How Long Content Stays in an Edge Cache \(Expiration\)](#) in the *Amazon CloudFront Developer Guide*.

Type: Long

Required: No

### FieldLevelEncryptionId

The value of `ID` for the field-level encryption configuration that you want CloudFront to use for encrypting specific fields of data for a cache behavior or for the default cache behavior in your distribution.

Type: String

Required: No

### ForwardedValues

A complex type that specifies how CloudFront handles query strings and cookies.

Type: [ForwardedValues \(p. 252\)](#) object

Required: Yes

#### **LambdaFunctionAssociations**

A complex type that contains zero or more Lambda function associations for a cache behavior.

Type: [LambdaFunctionAssociations \(p. 266\)](#) object

Required: No

#### **MaxTTL**

The maximum amount of time that you want objects to stay in CloudFront caches before CloudFront forwards another request to your origin to determine whether the object has been updated.

The value that you specify applies only when your origin adds HTTP headers such as Cache-Control max-age, Cache-Control s-maxage, and Expires to objects. For more information, see [Managing How Long Content Stays in an Edge Cache \(Expiration\)](#) in the *Amazon CloudFront Developer Guide*.

Type: Long

Required: No

#### **MinTTL**

The minimum amount of time that you want objects to stay in CloudFront caches before CloudFront forwards another request to your origin to determine whether the object has been updated. For more information, see [Managing How Long Content Stays in an Edge Cache \(Expiration\)](#) in the *Amazon CloudFront Developer Guide*.

You must specify 0 for MinTTL if you configure CloudFront to forward all headers to your origin (under Headers, if you specify 1 for Quantity and \* for Name).

Type: Long

Required: Yes

#### **SmoothStreaming**

Indicates whether you want to distribute media files in the Microsoft Smooth Streaming format using the origin that is associated with this cache behavior. If so, specify true; if not, specify false. If you specify true for SmoothStreaming, you can still distribute other content using this cache behavior if the content matches the value of PathPattern.

Type: Boolean

Required: No

#### **TargetOriginId**

The value of ID for the origin that you want CloudFront to route requests to when a request matches the path pattern either for a cache behavior or for the default cache behavior in your distribution.

Type: String

Required: Yes

#### **TrustedSigners**

A complex type that specifies the AWS accounts, if any, that you want to allow to create signed URLs for private content.

If you want to require signed URLs in requests for objects in the target origin that match the `PathPattern` for this cache behavior, specify `true` for `Enabled`, and specify the applicable values for `Quantity` and `Items`. For more information, see [Serving Private Content through CloudFront](#) in the *Amazon CloudFront Developer Guide*.

If you don't want to require signed URLs in requests for objects that match `PathPattern`, specify `false` for `Enabled` and 0 for `Quantity`. Omit `Items`.

To add, change, or remove one or more trusted signers, change `Enabled` to `true` (if it's currently `false`), change `Quantity` as applicable, and specify all of the trusted signers that you want to include in the updated distribution.

Type: [TrustedSigners \(p. 306\)](#) object

Required: Yes

#### ViewerProtocolPolicy

The protocol that viewers can use to access the files in the origin specified by `TargetOriginId` when a request matches the path pattern in `PathPattern`. You can specify the following options:

- `allow-all`: Viewers can use HTTP or HTTPS.
- `redirect-to-https`: If a viewer submits an HTTP request, CloudFront returns an HTTP status code of 301 (Moved Permanently) to the viewer along with the HTTPS URL. The viewer then resubmits the request using the new URL.
- `https-only`: If a viewer sends an HTTP request, CloudFront returns an HTTP status code of 403 (Forbidden).

For more information about requiring the HTTPS protocol, see [Using an HTTPS Connection to Access Your Objects](#) in the *Amazon CloudFront Developer Guide*.

#### Note

The only way to guarantee that viewers retrieve an object that was fetched from the origin using HTTPS is never to use any other protocol to fetch the object. If you have recently changed from HTTP to HTTPS, we recommend that you clear your objects' cache because cached objects are protocol agnostic. That means that an edge location will return an object from the cache regardless of whether the current request protocol matches the protocol used previously. For more information, see [Managing How Long Content Stays in an Edge Cache \(Expiration\)](#) in the *Amazon CloudFront Developer Guide*.

Type: String

Valid Values: `allow-all` | `https-only` | `redirect-to-https`

Required: Yes

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java](#)
- [AWS SDK for Ruby V2](#)

# Distribution

A distribution tells CloudFront where you want content to be delivered from, and the details about how to track and manage content delivery.

## Contents

### ActiveTrustedSigners

CloudFront automatically adds this element to the response only if you've set up the distribution to serve private content with signed URLs. The element lists the key pair IDs that CloudFront is aware of for each trusted signer. The `Signer` child element lists the AWS account number of the trusted signer (or an empty `Self` element if the signer is you). The `Signer` element also includes the IDs of any active key pairs associated with the trusted signer's AWS account. If no `KeyPairId` element appears for a `Signer`, that signer can't create working signed URLs.

Type: [ActiveTrustedSigners \(p. 198\)](#) object

Required: Yes

### AliasICPRecords

AWS services in China customers must file for an Internet Content Provider (ICP) recordal if they want to serve content publicly on an alternate domain name, also known as a CNAME, that they've added to CloudFront. `AliasICPRecordal` provides the ICP recordal status for CNAMEs associated with distributions.

For more information about ICP recordals, see [Signup, Accounts, and Credentials](#) in *Getting Started with AWS services in China*.

Type: Array of [AliasICPRecordal \(p. 200\)](#) objects

Required: No

### ARN

The ARN (Amazon Resource Name) for the distribution. For example:

`arn:aws:cloudfront::123456789012:distribution/EDFDVBD632BHDS5`, where 123456789012 is your AWS account ID.

Type: String

Required: Yes

### DistributionConfig

The current configuration information for the distribution. Send a GET request to the `/CloudFront API version/distribution ID/config` resource.

Type: [DistributionConfig \(p. 230\)](#) object

Required: Yes

### DomainName

The domain name corresponding to the distribution, for example, `d111111abcdef8.cloudfront.net`.

Type: String

Required: Yes

## Id

The identifier for the distribution. For example: EDFDVBD632BHDS5.

Type: String

Required: Yes

## InProgressInvalidationBatches

The number of invalidation batches currently in progress.

Type: Integer

Required: Yes

## LastModifiedTime

The date and time the distribution was last modified.

Type: Timestamp

Required: Yes

## Status

This response element indicates the current status of the distribution. When the status is Deployed, the distribution's information is fully propagated to all CloudFront edge locations.

Type: String

Required: Yes

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java](#)
- [AWS SDK for Ruby V2](#)

# DistributionConfig

A distribution configuration.

## Contents

### Aliases

A complex type that contains information about CNAMEs (alternate domain names), if any, for this distribution.

Type: [Aliases \(p. 199\)](#) object

Required: No

### CacheBehaviors

A complex type that contains zero or more CacheBehavior elements.

Type: [CacheBehaviors \(p. 207\)](#) object

Required: No

### CallerReference

A unique value (for example, a date-time stamp) that ensures that the request can't be replayed.

If the value of CallerReference is new (regardless of the content of the DistributionConfig object), CloudFront creates a new distribution.

If CallerReference is a value that you already sent in a previous request to create a distribution, CloudFront returns a `DistributionAlreadyExists` error.

Type: String

Required: Yes

### Comment

Any comments you want to include about the distribution.

If you don't want to specify a comment, include an empty Comment element.

To delete an existing comment, update the distribution configuration and include an empty Comment element.

To add or change a comment, update the distribution configuration and specify the new comment.

Type: String

Required: Yes

### CustomErrorResponses

A complex type that controls the following:

- Whether CloudFront replaces HTTP status codes in the 4xx and 5xx range with custom error messages before returning the response to the viewer.
- How long CloudFront caches HTTP status codes in the 4xx and 5xx range.

For more information about custom error pages, see [Customizing Error Responses](#) in the *Amazon CloudFront Developer Guide*.

Type: [CustomErrorResponses \(p. 221\)](#) object

Required: No

#### **DefaultCacheBehavior**

A complex type that describes the default cache behavior if you don't specify a `CacheBehavior` element or if files don't match any of the values of `PathPattern` in `CacheBehavior` elements. You must create exactly one default cache behavior.

Type: [DefaultCacheBehavior \(p. 225\)](#) object

Required: Yes

#### **DefaultRootObject**

The object that you want CloudFront to request from your origin (for example, `index.html`) when a viewer requests the root URL for your distribution (`http://www.example.com`) instead of an object in your distribution (`http://www.example.com/product-description.html`). Specifying a default root object avoids exposing the contents of your distribution.

Specify only the object name, for example, `index.html`. Don't add a / before the object name.

If you don't want to specify a default root object when you create a distribution, include an empty `DefaultRootObject` element.

To delete the default root object from an existing distribution, update the distribution configuration and include an empty `DefaultRootObject` element.

To replace the default root object, update the distribution configuration and specify the new object.

For more information about the default root object, see [Creating a Default Root Object](#) in the *Amazon CloudFront Developer Guide*.

Type: String

Required: No

#### **Enabled**

From this field, you can enable or disable the selected distribution.

Type: Boolean

Required: Yes

#### **HttpVersion**

(Optional) Specify the maximum HTTP version that you want viewers to use to communicate with CloudFront. The default value for new web distributions is `http2`. Viewers that don't support `HTTP/2` automatically use an earlier HTTP version.

For viewers and CloudFront to use `HTTP/2`, viewers must support TLS 1.2 or later, and must support Server Name Identification (SNI).

In general, configuring CloudFront to communicate with viewers using `HTTP/2` reduces latency. You can improve performance by optimizing for `HTTP/2`. For more information, do an Internet search for "http/2 optimization."

Type: String

Valid Values: `http1.1` | `http2`

Required: No

### **IsIPV6Enabled**

If you want CloudFront to respond to IPv6 DNS requests with an IPv6 address for your distribution, specify `true`. If you specify `false`, CloudFront responds to IPv6 DNS requests with the DNS response code `NOERROR` and with no IP addresses. This allows viewers to submit a second request, for an IPv4 address for your distribution.

In general, you should enable IPv6 if you have users on IPv6 networks who want to access your content. However, if you're using signed URLs or signed cookies to restrict access to your content, and if you're using a custom policy that includes the `IpAddress` parameter to restrict the IP addresses that can access your content, don't enable IPv6. If you want to restrict access to some content by IP address and not restrict access to other content (or restrict access but not by IP address), you can create two distributions. For more information, see [Creating a Signed URL Using a Custom Policy](#) in the *Amazon CloudFront Developer Guide*.

If you're using an Amazon Route 53 alias resource record set to route traffic to your CloudFront distribution, you need to create a second alias resource record set when both of the following are true:

- You enable IPv6 for the distribution
- You're using alternate domain names in the URLs for your objects

For more information, see [Routing Traffic to an Amazon CloudFront Web Distribution by Using Your Domain Name](#) in the *Amazon Route 53 Developer Guide*.

If you created a CNAME resource record set, either with Amazon Route 53 or with another DNS service, you don't need to make any changes. A CNAME record will route traffic to your distribution regardless of the IP address format of the viewer request.

Type: Boolean

Required: No

### **Logging**

A complex type that controls whether access logs are written for the distribution.

For more information about logging, see [Access Logs](#) in the *Amazon CloudFront Developer Guide*.

Type: [LoggingConfig \(p. 267\)](#) object

Required: No

### **OriginGroups**

A complex type that contains information about origin groups for this distribution.

Type: [OriginGroups \(p. 276\)](#) object

Required: No

### **Origins**

A complex type that contains information about origins for this distribution.

Type: [Origins \(p. 277\)](#) object

Required: Yes

### **PriceClass**

The price class that corresponds with the maximum price that you want to pay for CloudFront service. If you specify `PriceClass_All`, CloudFront responds to requests for your objects from all CloudFront edge locations.

If you specify a price class other than `PriceClass_All`, CloudFront serves your objects from the CloudFront edge location that has the lowest latency among the edge locations in your price class. Viewers who are in or near regions that are excluded from your specified price class may encounter slower performance.

For more information about price classes, see [Choosing the Price Class for a CloudFront Distribution](#) in the *Amazon CloudFront Developer Guide*. For information about CloudFront pricing, including how price classes (such as Price Class 100) map to CloudFront regions, see [Amazon CloudFront Pricing](#). For price class information, scroll down to see the table at the bottom of the page.

Type: String

Valid Values: `PriceClass_100` | `PriceClass_200` | `PriceClass_All`

Required: No

#### Restrictions

A complex type that identifies ways in which you want to restrict distribution of your content.

Type: [Restrictions \(p. 288\)](#) object

Required: No

#### ViewerCertificate

A complex type that specifies whether you want viewers to use HTTP or HTTPS to request your objects, whether you're using an alternate domain name with HTTPS, and if so, if you're using AWS Certificate Manager (ACM) or a third-party certificate authority.

Type: [ViewerCertificate \(p. 307\)](#) object

Required: No

#### WebACLId

A unique identifier that specifies the AWS WAF web ACL, if any, to associate with this distribution.

AWS WAF is a web application firewall that lets you monitor the HTTP and HTTPS requests that are forwarded to CloudFront, and lets you control access to your content. Based on conditions that you specify, such as the IP addresses that requests originate from or the values of query strings, CloudFront responds to requests either with the requested content or with an HTTP 403 status code (Forbidden). You can also configure CloudFront to return a custom error page when a request is blocked. For more information about AWS WAF, see the [AWS WAF Developer Guide](#).

Type: String

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java](#)
- [AWS SDK for Ruby V2](#)

# DistributionConfigWithTags

A distribution Configuration and a list of tags to be associated with the distribution.

## Contents

### **DistributionConfig**

A distribution configuration.

Type: [DistributionConfig \(p. 230\)](#) object

Required: Yes

### **Tags**

A complex type that contains zero or more Tag elements.

Type: [Tags \(p. 305\)](#) object

Required: Yes

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java](#)
- [AWS SDK for Ruby V2](#)

# DistributionList

A distribution list.

## Contents

### **IsTruncated**

A flag that indicates whether more distributions remain to be listed. If your results were truncated, you can make a follow-up pagination request using the `Marker` request parameter to retrieve more distributions in the list.

Type: Boolean

Required: Yes

### **Items**

A complex type that contains one `DistributionSummary` element for each distribution that was created by the current AWS account.

Type: Array of [DistributionSummary \(p. 237\)](#) objects

Required: No

### **Marker**

The value you provided for the `Marker` request parameter.

Type: String

Required: Yes

### **MaxItems**

The value you provided for the `MaxItems` request parameter.

Type: Integer

Required: Yes

### **NextMarker**

If `IsTruncated` is `true`, this element is present and contains the value you can use for the `Marker` request parameter to continue listing your distributions where they left off.

Type: String

Required: No

### **Quantity**

The number of distributions that were created by the current AWS account.

Type: Integer

Required: Yes

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java](#)
- [AWS SDK for Ruby V2](#)

# DistributionSummary

A summary of the information about a CloudFront distribution.

## Contents

### Aliases

A complex type that contains information about CNAMEs (alternate domain names), if any, for this distribution.

Type: [Aliases \(p. 199\)](#) object

Required: Yes

### AliasICPRecords

AWS services in China customers must file for an Internet Content Provider (ICP) recordal if they want to serve content publicly on an alternate domain name, also known as a CNAME, that they've added to CloudFront. AliasICPRecordal provides the ICP recordal status for CNAMEs associated with distributions.

For more information about ICP recordals, see [Signup, Accounts, and Credentials](#) in *Getting Started with AWS services in China*.

Type: Array of [AliasICPRecordal \(p. 200\)](#) objects

Required: No

### ARN

The ARN (Amazon Resource Name) for the distribution. For example:

`arn:aws:cloudfront::123456789012:distribution/EDFDVBD632BHDS5`, where 123456789012 is your AWS account ID.

Type: String

Required: Yes

### CacheBehaviors

A complex type that contains zero or more CacheBehavior elements.

Type: [CacheBehaviors \(p. 207\)](#) object

Required: Yes

### Comment

The comment originally specified when this distribution was created.

Type: String

Required: Yes

### CustomErrorResponsees

A complex type that contains zero or more CustomErrorResponses elements.

Type: [CustomErrorResponses \(p. 221\)](#) object

Required: Yes

**DefaultCacheBehavior**

A complex type that describes the default cache behavior if you don't specify a `CacheBehavior` element or if files don't match any of the values of `PathPattern` in `CacheBehavior` elements. You must create exactly one default cache behavior.

Type: [DefaultCacheBehavior \(p. 225\)](#) object

Required: Yes

**DomainName**

The domain name that corresponds to the distribution, for example, `d111111abcdef8.cloudfront.net`.

Type: String

Required: Yes

**Enabled**

Whether the distribution is enabled to accept user requests for content.

Type: Boolean

Required: Yes

**HttpVersion**

Specify the maximum HTTP version that you want viewers to use to communicate with CloudFront. The default value for new web distributions is `http2`. Viewers that don't support `HTTP/2` will automatically use an earlier version.

Type: String

Valid Values: `http1.1` | `http2`

Required: Yes

**Id**

The identifier for the distribution. For example: `EDFDVBD632BHDS5`.

Type: String

Required: Yes

**IsIPV6Enabled**

Whether CloudFront responds to IPv6 DNS requests with an IPv6 address for your distribution.

Type: Boolean

Required: Yes

**LastModifiedTime**

The date and time the distribution was last modified.

Type: Timestamp

Required: Yes

**OriginGroups**

A complex type that contains information about origin groups for this distribution.

Type: [OriginGroups \(p. 276\)](#) object

Required: No

### Origins

A complex type that contains information about origins for this distribution.

Type: [Origins \(p. 277\)](#) object

Required: Yes

### PriceClass

A complex type that contains information about price class for this streaming distribution.

Type: String

Valid Values: `PriceClass_100` | `PriceClass_200` | `PriceClass_All`

Required: Yes

### Restrictions

A complex type that identifies ways in which you want to restrict distribution of your content.

Type: [Restrictions \(p. 288\)](#) object

Required: Yes

### Status

The current status of the distribution. When the status is `Deployed`, the distribution's information is propagated to all CloudFront edge locations.

Type: String

Required: Yes

### ViewerCertificate

A complex type that specifies whether you want viewers to use HTTP or HTTPS to request your objects, whether you're using an alternate domain name with HTTPS, and if so, if you're using AWS Certificate Manager (ACM) or a third-party certificate authority.

Type: [ViewerCertificate \(p. 307\)](#) object

Required: Yes

### WebACLId

The Web ACL Id (if any) associated with the distribution.

Type: String

Required: Yes

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)

- [AWS SDK for Java](#)
- [AWS SDK for Ruby V2](#)

# EncryptionEntities

Complex data type for field-level encryption profiles that includes all of the encryption entities.

## Contents

### Items

An array of field patterns in a field-level encryption content type-profile mapping.

Type: Array of [EncryptionEntity \(p. 242\)](#) objects

Required: No

### Quantity

Number of field pattern items in a field-level encryption content type-profile mapping.

Type: Integer

Required: Yes

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java](#)
- [AWS SDK for Ruby V2](#)

# EncryptionEntity

Complex data type for field-level encryption profiles that includes the encryption key and field pattern specifications.

## Contents

### **FieldPatterns**

Field patterns in a field-level encryption content type profile specify the fields that you want to be encrypted. You can provide the full field name, or any beginning characters followed by a wildcard (\*). You can't overlap field patterns. For example, you can't have both ABC\* and AB\*. Note that field patterns are case-sensitive.

Type: [FieldPatterns \(p. 251\)](#) object

Required: Yes

### **ProviderId**

The provider associated with the public key being used for encryption. This value must also be provided with the private key for applications to be able to decrypt data.

Type: String

Required: Yes

### **PublicKeyId**

The public key associated with a set of field-level encryption patterns, to be used when encrypting the fields that match the patterns.

Type: String

Required: Yes

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java](#)
- [AWS SDK for Ruby V2](#)

# FieldLevelEncryption

A complex data type that includes the profile configurations and other options specified for field-level encryption.

## Contents

### **FieldLevelEncryptionConfig**

A complex data type that includes the profile configurations specified for field-level encryption.

Type: [FieldLevelEncryptionConfig \(p. 244\)](#) object

Required: Yes

### **Id**

The configuration ID for a field-level encryption configuration which includes a set of profiles that specify certain selected data fields to be encrypted by specific public keys.

Type: String

Required: Yes

### **LastModifiedTime**

The last time the field-level encryption configuration was changed.

Type: Timestamp

Required: Yes

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java](#)
- [AWS SDK for Ruby V2](#)

# FieldLevelEncryptionConfig

A complex data type that includes the profile configurations specified for field-level encryption.

## Contents

### **CallerReference**

A unique number that ensures the request can't be replayed.

Type: String

Required: Yes

### **Comment**

An optional comment about the configuration.

Type: String

Required: No

### **ContentTypeProfileConfig**

A complex data type that specifies when to forward content if a content type isn't recognized and profiles to use as by default in a request if a query argument doesn't specify a profile to use.

Type: [ContentTypeProfileConfig \(p. 215\)](#) object

Required: No

### **QueryArgProfileConfig**

A complex data type that specifies when to forward content if a profile isn't found and the profile that can be provided as a query argument in a request.

Type: [QueryArgProfileConfig \(p. 285\)](#) object

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java](#)
- [AWS SDK for Ruby V2](#)

# FieldLevelEncryptionList

List of field-level encryption configurations.

## Contents

### Items

An array of field-level encryption items.

Type: Array of [FieldLevelEncryptionSummary \(p. 250\)](#) objects

Required: No

### MaxItems

The maximum number of elements you want in the response body.

Type: Integer

Required: Yes

### NextMarker

If there are more elements to be listed, this element is present and contains the value that you can use for the `Marker` request parameter to continue listing your configurations where you left off.

Type: String

Required: No

### Quantity

The number of field-level encryption items.

Type: Integer

Required: Yes

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java](#)
- [AWS SDK for Ruby V2](#)

# FieldLevelEncryptionProfile

A complex data type for field-level encryption profiles.

## Contents

### FieldLevelEncryptionProfileConfig

A complex data type that includes the profile name and the encryption entities for the field-level encryption profile.

Type: [FieldLevelEncryptionProfileConfig \(p. 247\)](#) object

Required: Yes

### Id

The ID for a field-level encryption profile configuration which includes a set of profiles that specify certain selected data fields to be encrypted by specific public keys.

Type: String

Required: Yes

### LastModifiedTime

The last time the field-level encryption profile was updated.

Type: Timestamp

Required: Yes

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java](#)
- [AWS SDK for Ruby V2](#)

# FieldLevelEncryptionProfileConfig

A complex data type of profiles for the field-level encryption.

## Contents

### **CallerReference**

A unique number that ensures that the request can't be replayed.

Type: String

Required: Yes

### **Comment**

An optional comment for the field-level encryption profile.

Type: String

Required: No

### **EncryptionEntities**

A complex data type of encryption entities for the field-level encryption profile that include the public key ID, provider, and field patterns for specifying which fields to encrypt with this key.

Type: [EncryptionEntities \(p. 241\)](#) object

Required: Yes

### **Name**

Profile name for the field-level encryption profile.

Type: String

Required: Yes

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java](#)
- [AWS SDK for Ruby V2](#)

# FieldLevelEncryptionProfileList

List of field-level encryption profiles.

## Contents

### Items

The field-level encryption profile items.

Type: Array of [FieldLevelEncryptionProfileSummary \(p. 249\)](#) objects

Required: No

### MaxItems

The maximum number of field-level encryption profiles you want in the response body.

Type: Integer

Required: Yes

### NextMarker

If there are more elements to be listed, this element is present and contains the value that you can use for the `Marker` request parameter to continue listing your profiles where you left off.

Type: String

Required: No

### Quantity

The number of field-level encryption profiles.

Type: Integer

Required: Yes

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java](#)
- [AWS SDK for Ruby V2](#)

# FieldLevelEncryptionProfileSummary

The field-level encryption profile summary.

## Contents

### **Comment**

An optional comment for the field-level encryption profile summary.

Type: String

Required: No

### **EncryptionEntities**

A complex data type of encryption entities for the field-level encryption profile that include the public key ID, provider, and field patterns for specifying which fields to encrypt with this key.

Type: [EncryptionEntities \(p. 241\)](#) object

Required: Yes

### **Id**

ID for the field-level encryption profile summary.

Type: String

Required: Yes

### **LastModifiedTime**

The time when the the field-level encryption profile summary was last updated.

Type: Timestamp

Required: Yes

### **Name**

Name for the field-level encryption profile summary.

Type: String

Required: Yes

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java](#)
- [AWS SDK for Ruby V2](#)

# FieldLevelEncryptionSummary

A summary of a field-level encryption item.

## Contents

### **Comment**

An optional comment about the field-level encryption item.

Type: String

Required: No

### **ContentTypeProfileConfig**

A summary of a content type-profile mapping.

Type: [ContentTypeProfileConfig \(p. 215\)](#) object

Required: No

### **Id**

The unique ID of a field-level encryption item.

Type: String

Required: Yes

### **LastModifiedTime**

The last time that the summary of field-level encryption items was modified.

Type: Timestamp

Required: Yes

### **QueryArgProfileConfig**

A summary of a query argument-profile mapping.

Type: [QueryArgProfileConfig \(p. 285\)](#) object

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java](#)
- [AWS SDK for Ruby V2](#)

# FieldPatterns

A complex data type that includes the field patterns to match for field-level encryption.

## Contents

### Items

An array of the field-level encryption field patterns.

Type: Array of strings

Required: No

### Quantity

The number of field-level encryption field patterns.

Type: Integer

Required: Yes

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java](#)
- [AWS SDK for Ruby V2](#)

# ForwardedValues

A complex type that specifies how CloudFront handles query strings and cookies.

## Contents

### Cookies

A complex type that specifies whether you want CloudFront to forward cookies to the origin and, if so, which ones. For more information about forwarding cookies to the origin, see [How CloudFront Forwards, Caches, and Logs Cookies](#) in the *Amazon CloudFront Developer Guide*.

Type: [CookiePreference \(p. 218\)](#) object

Required: Yes

### Headers

A complex type that specifies the `Headers`, if any, that you want CloudFront to forward to the origin for this cache behavior (whitelisted headers). For the headers that you specify, CloudFront also caches separate versions of a specified object that is based on the header values in viewer requests.

For more information, see [Caching Content Based on Request Headers](#) in the *Amazon CloudFront Developer Guide*.

Type: [Headers \(p. 256\)](#) object

Required: No

### QueryString

Indicates whether you want CloudFront to forward query strings to the origin that is associated with this cache behavior and cache based on the query string parameters. CloudFront behavior depends on the value of `QueryString` and on the values that you specify for `QueryStringCacheKeys`, if any:

If you specify `true` for `QueryString` and you don't specify any values for `QueryStringCacheKeys`, CloudFront forwards all query string parameters to the origin and caches based on all query string parameters. Depending on how many query string parameters and values you have, this can adversely affect performance because CloudFront must forward more requests to the origin.

If you specify `true` for `QueryString` and you specify one or more values for `QueryStringCacheKeys`, CloudFront forwards all query string parameters to the origin, but it only caches based on the query string parameters that you specify.

If you specify `false` for `QueryString`, CloudFront doesn't forward any query string parameters to the origin, and doesn't cache based on query string parameters.

For more information, see [Configuring CloudFront to Cache Based on Query String Parameters](#) in the *Amazon CloudFront Developer Guide*.

Type: Boolean

Required: Yes

### QueryStringCacheKeys

A complex type that contains information about the query string parameters that you want CloudFront to use for caching for this cache behavior.

Type: [QueryStringCacheKeys \(p. 287\)](#) object

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java](#)
- [AWS SDK for Ruby V2](#)

# GeoRestriction

A complex type that controls the countries in which your content is distributed. CloudFront determines the location of your users using MaxMind GeoIP databases.

## Contents

### Items

A complex type that contains a `Location` element for each country in which you want CloudFront either to distribute your content (`whitelist`) or not distribute your content (`blacklist`).

The `Location` element is a two-letter, uppercase country code for a country that you want to include in your `blacklist` or `whitelist`. Include one `Location` element for each country.

CloudFront and MaxMind both use ISO 3166 country codes. For the current list of countries and the corresponding codes, see ISO 3166-1-alpha-2 code on the *International Organization for Standardization* website. You can also refer to the country list on the CloudFront console, which includes both country names and codes.

Type: Array of strings

Required: No

### Quantity

When geo restriction is enabled, this is the number of countries in your `whitelist` or `blacklist`. Otherwise, when it is not enabled, `Quantity` is 0, and you can omit `Items`.

Type: Integer

Required: Yes

### RestrictionType

The method that you want to use to restrict distribution of your content by country:

- `none`: No geo restriction is enabled, meaning access to content is not restricted by client geo location.
- `blacklist`: The `Location` elements specify the countries in which you don't want CloudFront to distribute your content.
- `whitelist`: The `Location` elements specify the countries in which you want CloudFront to distribute your content.

Type: String

Valid Values: `blacklist` | `whitelist` | `none`

Required: Yes

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java](#)

- [AWS SDK for Ruby V2](#)

# Headers

A complex type that specifies the request headers, if any, that you want CloudFront to base caching on for this cache behavior.

For the headers that you specify, CloudFront caches separate versions of a specified object based on the header values in viewer requests. For example, suppose viewer requests for `logo.jpg` contain a custom product header that has a value of either `acme` or `apex`, and you configure CloudFront to cache your content based on values in the product header. CloudFront forwards the product header to the origin and caches the response from the origin once for each header value. For more information about caching based on header values, see [How CloudFront Forwards and Caches Headers](#) in the *Amazon CloudFront Developer Guide*.

## Contents

### Items

A list that contains one `Name` element for each header that you want CloudFront to use for caching in this cache behavior. If `Quantity` is 0, omit `Items`.

Type: Array of strings

Required: No

### Quantity

The number of different headers that you want CloudFront to base caching on for this cache behavior. You can configure each cache behavior in a web distribution to do one of the following:

- **Forward all headers to your origin:** Specify 1 for `Quantity` and \* for `Name`.

#### Important

CloudFront doesn't cache the objects that are associated with this cache behavior. Instead, CloudFront sends every request to the origin.

- **Forward a whitelist of headers you specify:** Specify the number of headers that you want CloudFront to base caching on. Then specify the header names in `Name` elements. CloudFront caches your objects based on the values in the specified headers.
- **Forward only the default headers:** Specify 0 for `Quantity` and omit `Items`. In this configuration, CloudFront doesn't cache based on the values in the request headers.

Regardless of which option you choose, CloudFront forwards headers to your origin based on whether the origin is an S3 bucket or a custom origin. See the following documentation:

- **S3 bucket:** See [HTTP Request Headers That CloudFront Removes or Updates](#)
- **Custom origin:** See [HTTP Request Headers and CloudFront Behavior](#)

Type: Integer

Required: Yes

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java](#)

- [AWS SDK for Ruby V2](#)

# Invalidation

An invalidation.

## Contents

### **CreateTime**

The date and time the invalidation request was first made.

Type: Timestamp

Required: Yes

### **Id**

The identifier for the invalidation request. For example: `IDFDVBD632BHDS5`.

Type: String

Required: Yes

### **InvalidationBatch**

The current invalidation information for the batch request.

Type: [InvalidationBatch \(p. 259\)](#) object

Required: Yes

### **Status**

The status of the invalidation request. When the invalidation batch is finished, the status is `Completed`.

Type: String

Required: Yes

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java](#)
- [AWS SDK for Ruby V2](#)

# InvalidationBatch

An invalidation batch.

## Contents

### CallerReference

A value that you specify to uniquely identify an invalidation request. CloudFront uses the value to prevent you from accidentally resubmitting an identical request. Whenever you create a new invalidation request, you must specify a new value for `CallerReference` and change other values in the request as applicable. One way to ensure that the value of `CallerReference` is unique is to use a timestamp, for example, 20120301090000.

If you make a second invalidation request with the same value for `CallerReference`, and if the rest of the request is the same, CloudFront doesn't create a new invalidation request. Instead, CloudFront returns information about the invalidation request that you previously created with the same `CallerReference`.

If `CallerReference` is a value you already sent in a previous invalidation batch request but the content of any `Path` is different from the original request, CloudFront returns an `InvalidationBatchAlreadyExists` error.

Type: String

Required: Yes

### Paths

A complex type that contains information about the objects that you want to invalidate. For more information, see [Specifying the Objects to Invalidate](#) in the *Amazon CloudFront Developer Guide*.

Type: [Paths \(p. 279\)](#) object

Required: Yes

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java](#)
- [AWS SDK for Ruby V2](#)

# InvalidationList

The `InvalidationList` complex type describes the list of invalidation objects. For more information about invalidation, see [Invalidating Objects \(Web Distributions Only\)](#) in the *Amazon CloudFront Developer Guide*.

## Contents

### **IsTruncated**

A flag that indicates whether more invalidation batch requests remain to be listed. If your results were truncated, you can make a follow-up pagination request using the `Marker` request parameter to retrieve more invalidation batches in the list.

Type: Boolean

Required: Yes

### **Items**

A complex type that contains one `InvalidationSummary` element for each invalidation batch created by the current AWS account.

Type: Array of [InvalidationSummary \(p. 262\)](#) objects

Required: No

### **Marker**

The value that you provided for the `Marker` request parameter.

Type: String

Required: Yes

### **MaxItems**

The value that you provided for the `MaxItems` request parameter.

Type: Integer

Required: Yes

### **NextMarker**

If `IsTruncated` is `true`, this element is present and contains the value that you can use for the `Marker` request parameter to continue listing your invalidation batches where they left off.

Type: String

Required: No

### **Quantity**

The number of invalidation batches that were created by the current AWS account.

Type: Integer

Required: Yes

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java](#)
- [AWS SDK for Ruby V2](#)

# InvalidationSummary

A summary of an invalidation request.

## Contents

### CreateTime

The time that an invalidation request was created.

Type: Timestamp

Required: Yes

### Id

The unique ID for an invalidation request.

Type: String

Required: Yes

### Status

The status of an invalidation request.

Type: String

Required: Yes

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java](#)
- [AWS SDK for Ruby V2](#)

# KeyPairIds

A complex type that lists the active CloudFront key pairs, if any, that are associated with `AwsAccountNumber`.

For more information, see [ActiveTrustedSigners](#).

## Contents

### Items

A complex type that lists the active CloudFront key pairs, if any, that are associated with `AwsAccountNumber`.

For more information, see [ActiveTrustedSigners](#).

Type: Array of strings

Required: No

### Quantity

The number of active CloudFront key pairs for `AwsAccountNumber`.

For more information, see [ActiveTrustedSigners](#).

Type: Integer

Required: Yes

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java](#)
- [AWS SDK for Ruby V2](#)

# LambdaFunctionAssociation

A complex type that contains a Lambda function association.

## Contents

### EventType

Specifies the event type that triggers a Lambda function invocation. You can specify the following values:

- **viewer-request**: The function executes when CloudFront receives a request from a viewer and before it checks to see whether the requested object is in the edge cache.
- **origin-request**: The function executes only when CloudFront forwards a request to your origin. When the requested object is in the edge cache, the function doesn't execute.
- **origin-response**: The function executes after CloudFront receives a response from the origin and before it caches the object in the response. When the requested object is in the edge cache, the function doesn't execute.
- **viewer-response**: The function executes before CloudFront returns the requested object to the viewer. The function executes regardless of whether the object was already in the edge cache.

If the origin returns an HTTP status code other than HTTP 200 (OK), the function doesn't execute.

Type: String

Valid Values: `viewer-request` | `viewer-response` | `origin-request` | `origin-response`

Required: Yes

### IncludeBody

A flag that allows a Lambda function to have read access to the body content. For more information, see [Accessing the Request Body by Choosing the Include Body Option](#) in the Amazon CloudFront Developer Guide.

Type: Boolean

Required: No

### LambdaFunctionARN

The ARN of the Lambda function. You must specify the ARN of a function version; you can't specify a Lambda alias or \$LATEST.

Type: String

Required: Yes

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java](#)
- [AWS SDK for Ruby V2](#)



# LambdaFunctionAssociations

A complex type that specifies a list of Lambda functions associations for a cache behavior.

If you want to invoke one or more Lambda functions triggered by requests that match the `PathPattern` of the cache behavior, specify the applicable values for `Quantity` and `Items`. Note that there can be up to 4 `LambdaFunctionAssociation` items in this list (one for each possible value of `EventType`) and each `EventType` can be associated with the Lambda function only once.

If you don't want to invoke any Lambda functions for the requests that match `PathPattern`, specify 0 for `Quantity` and omit `Items`.

## Contents

### Items

**Optional:** A complex type that contains `LambdaFunctionAssociation` items for this cache behavior. If `Quantity` is 0, you can omit `Items`.

Type: Array of [LambdaFunctionAssociation \(p. 264\)](#) objects

Required: No

### Quantity

The number of Lambda function associations for this cache behavior.

Type: Integer

Required: Yes

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java](#)
- [AWS SDK for Ruby V2](#)

# LoggingConfig

A complex type that controls whether access logs are written for the distribution.

## Contents

### Bucket

The Amazon S3 bucket to store the access logs in, for example, `myawslogbucket.s3.amazonaws.com`.

Type: String

Required: Yes

### Enabled

Specifies whether you want CloudFront to save access logs to an Amazon S3 bucket. If you don't want to enable logging when you create a distribution or if you want to disable logging for an existing distribution, specify `false` for `Enabled`, and specify empty `Bucket` and `Prefix` elements. If you specify `false` for `Enabled` but you specify values for `Bucket`, `prefix`, and `IncludeCookies`, the values are automatically deleted.

Type: Boolean

Required: Yes

### IncludeCookies

Specifies whether you want CloudFront to include cookies in access logs, specify `true` for `IncludeCookies`. If you choose to include cookies in logs, CloudFront logs all cookies regardless of how you configure the cache behaviors for this distribution. If you don't want to include cookies when you create a distribution or if you want to disable include cookies for an existing distribution, specify `false` for `IncludeCookies`.

Type: Boolean

Required: Yes

### Prefix

An optional string that you want CloudFront to prefix to the access log filenames for this distribution, for example, `myprefix/`. If you want to enable logging, but you don't want to specify a prefix, you still must include an empty `Prefix` element in the `Logging` element.

Type: String

Required: Yes

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java](#)
- [AWS SDK for Ruby V2](#)



# Origin

A complex type that describes the Amazon S3 bucket, HTTP server (for example, a web server), Amazon MediaStore, or other server from which CloudFront gets your files. This can also be an origin group, if you've created an origin group. You must specify at least one origin or origin group.

For the current limit on the number of origins or origin groups that you can specify for a distribution, see [Amazon CloudFront Limits](#) in the *AWS General Reference*.

## Contents

### CustomHeaders

A complex type that contains names and values for the custom headers that you want.

Type: [CustomHeaders \(p. 222\)](#) object

Required: No

### CustomOriginConfig

A complex type that contains information about a custom origin. If the origin is an Amazon S3 bucket, use the `S3OriginConfig` element instead.

Type: [CustomOriginConfig \(p. 223\)](#) object

Required: No

### DomainName

**Amazon S3 origins:** The DNS name of the Amazon S3 bucket from which you want CloudFront to get objects for this origin, for example, `myawsbucket.s3.amazonaws.com`. If you set up your bucket to be configured as a website endpoint, enter the Amazon S3 static website hosting endpoint for the bucket.

For more information about specifying this value for different types of origins, see [Origin Domain Name](#) in the *Amazon CloudFront Developer Guide*.

Constraints for Amazon S3 origins:

- If you configured Amazon S3 Transfer Acceleration for your bucket, don't specify the `s3-accelerate` endpoint for `DomainName`.
- The bucket name must be between 3 and 63 characters long (inclusive).
- The bucket name must contain only lowercase characters, numbers, periods, underscores, and dashes.
- The bucket name must not contain adjacent periods.

**Custom Origins:** The DNS domain name for the HTTP server from which you want CloudFront to get objects for this origin, for example, `www.example.com`.

Constraints for custom origins:

- `DomainName` must be a valid DNS name that contains only a-z, A-Z, 0-9, dot (.), hyphen (-), or underscore (\_) characters.
- The name cannot exceed 128 characters.

Type: String

Required: Yes

## Id

A unique identifier for the origin or origin group. The value of `Id` must be unique within the distribution.

When you specify the value of `TargetOriginId` for the default cache behavior or for another cache behavior, you indicate the origin to which you want the cache behavior to route requests by specifying the value of the `Id` element for that origin. When a request matches the path pattern for that cache behavior, CloudFront routes the request to the specified origin. For more information, see [Cache Behavior Settings](#) in the *Amazon CloudFront Developer Guide*.

Type: String

Required: Yes

## OriginPath

An optional element that causes CloudFront to request your content from a directory in your Amazon S3 bucket or your custom origin. When you include the `OriginPath` element, specify the directory name, beginning with a /. CloudFront appends the directory name to the value of `DomainName`, for example, `example.com/production`. Do not include a / at the end of the directory name.

For example, suppose you've specified the following values for your distribution:

- `DomainName`: An Amazon S3 bucket named `myawsbucket`.
- `OriginPath`: `/production`
- `CNAME`: `example.com`

When a user enters `example.com/index.html` in a browser, CloudFront sends a request to Amazon S3 for `myawsbucket/production/index.html`.

When a user enters `example.com/acme/index.html` in a browser, CloudFront sends a request to Amazon S3 for `myawsbucket/production/acme/index.html`.

Type: String

Required: No

## S3OriginConfig

A complex type that contains information about the Amazon S3 origin. If the origin is a custom origin, use the `CustomOriginConfig` element instead.

Type: [S3OriginConfig \(p. 290\)](#) object

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java](#)
- [AWS SDK for Ruby V2](#)

# OriginCustomHeader

A complex type that contains `HeaderName` and `HeaderValue` elements, if any, for this distribution.

## Contents

### **HeaderName**

The name of a header that you want CloudFront to forward to your origin. For more information, see [Forwarding Custom Headers to Your Origin \(Web Distributions Only\)](#) in the *Amazon CloudFront Developer Guide*.

Type: String

Required: Yes

### **HeaderValue**

The value for the header that you specified in the `HeaderName` field.

Type: String

Required: Yes

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java](#)
- [AWS SDK for Ruby V2](#)

# OriginGroup

An origin group includes two origins (a primary origin and a second origin to failover to) and a failover criteria that you specify. You create an origin group to support origin failover in CloudFront. When you create or update a distribution, you can specify the origin group instead of a single origin, and CloudFront will failover from the primary origin to the second origin under the failover conditions that you've chosen.

## Contents

### **FailoverCriteria**

A complex type that contains information about the failover criteria for an origin group.

Type: [OriginGroupFailoverCriteria \(p. 273\)](#) object

Required: Yes

### **Id**

The origin group's ID.

Type: String

Required: Yes

### **Members**

A complex type that contains information about the origins in an origin group.

Type: [OriginGroupMembers \(p. 275\)](#) object

Required: Yes

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java](#)
- [AWS SDK for Ruby V2](#)

# OriginGroupFailoverCriteria

A complex data type that includes information about the failover criteria for an origin group, including the status codes for which CloudFront will failover from the primary origin to the second origin.

## Contents

### StatusCodes

The status codes that, when returned from the primary origin, will trigger CloudFront to failover to the second origin.

Type: [StatusCodes \(p. 292\)](#) object

Required: Yes

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java](#)
- [AWS SDK for Ruby V2](#)

# OriginGroupMember

An origin in an origin group.

## Contents

### OriginId

The ID for an origin in an origin group.

Type: String

Required: Yes

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java](#)
- [AWS SDK for Ruby V2](#)

# OriginGroupMembers

A complex data type for the origins included in an origin group.

## Contents

### Items

Items (origins) in an origin group.

Type: Array of [OriginGroupMember \(p. 274\)](#) objects

Array Members: Fixed number of 2 items.

Required: Yes

### Quantity

The number of origins in an origin group.

Type: Integer

Required: Yes

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java](#)
- [AWS SDK for Ruby V2](#)

# OriginGroups

A complex data type for the origin groups specified for a distribution.

## Contents

### Items

The items (origin groups) in a distribution.

Type: Array of [OriginGroup \(p. 272\)](#) objects

Required: No

### Quantity

The number of origin groups.

Type: Integer

Required: Yes

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java](#)
- [AWS SDK for Ruby V2](#)

# Origins

A complex type that contains information about origins and origin groups for this distribution.

## Contents

### Items

A complex type that contains origins or origin groups for this distribution.

Type: Array of [Origin \(p. 269\)](#) objects

Array Members: Minimum number of 1 item.

Required: Yes

### Quantity

The number of origins or origin groups for this distribution.

Type: Integer

Required: Yes

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java](#)
- [AWS SDK for Ruby V2](#)

# OriginSslProtocols

A complex type that contains information about the SSL/TLS protocols that CloudFront can use when establishing an HTTPS connection with your origin.

## Contents

### Items

A list that contains allowed SSL/TLS protocols for this distribution.

Type: Array of strings

Valid Values: SSLv3 | TLSv1 | TLSv1.1 | TLSv1.2

Required: Yes

### Quantity

The number of SSL/TLS protocols that you want to allow CloudFront to use when establishing an HTTPS connection with this origin.

Type: Integer

Required: Yes

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java](#)
- [AWS SDK for Ruby V2](#)

# Paths

A complex type that contains information about the objects that you want to invalidate. For more information, see [Specifying the Objects to Invalidate](#) in the *Amazon CloudFront Developer Guide*.

## Contents

### Items

A complex type that contains a list of the paths that you want to invalidate.

Type: Array of strings

Required: No

### Quantity

The number of invalidation paths specified for the objects that you want to invalidate.

Type: Integer

Required: Yes

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java](#)
- [AWS SDK for Ruby V2](#)

# PublicKey

A complex data type of public keys you add to CloudFront to use with features like field-level encryption.

## Contents

### **CreatedTime**

A time you added a public key to CloudFront.

Type: Timestamp

Required: Yes

### **Id**

A unique ID assigned to a public key you've added to CloudFront.

Type: String

Required: Yes

### **PublicKeyConfig**

A complex data type for a public key you add to CloudFront to use with features like field-level encryption.

Type: [PublicKeyConfig \(p. 281\)](#) object

Required: Yes

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java](#)
- [AWS SDK for Ruby V2](#)

# PublicKeyConfig

Information about a public key you add to CloudFront to use with features like field-level encryption.

## Contents

### **CallerReference**

A unique number that ensures that the request can't be replayed.

Type: String

Required: Yes

### **Comment**

An optional comment about a public key.

Type: String

Required: No

### **EncodedKey**

The encoded public key that you want to add to CloudFront to use with features like field-level encryption.

Type: String

Required: Yes

### **Name**

The name for a public key you add to CloudFront to use with features like field-level encryption.

Type: String

Required: Yes

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java](#)
- [AWS SDK for Ruby V2](#)

# PublicKeyList

A list of public keys you've added to CloudFront to use with features like field-level encryption.

## Contents

### Items

An array of information about a public key you add to CloudFront to use with features like field-level encryption.

Type: Array of [PublicKeySummary \(p. 283\)](#) objects

Required: No

### MaxItems

The maximum number of public keys you want in the response body.

Type: Integer

Required: Yes

### NextMarker

If there are more elements to be listed, this element is present and contains the value that you can use for the `Marker` request parameter to continue listing your public keys where you left off.

Type: String

Required: No

### Quantity

The number of public keys you added to CloudFront to use with features like field-level encryption.

Type: Integer

Required: Yes

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java](#)
- [AWS SDK for Ruby V2](#)

# PublicKeySummary

A complex data type for public key information.

## Contents

### **Comment**

Comment for public key information summary.

Type: String

Required: No

### **CreatedTime**

Creation time for public key information summary.

Type: Timestamp

Required: Yes

### **EncodedKey**

Encoded key for public key information summary.

Type: String

Required: Yes

### **Id**

ID for public key information summary.

Type: String

Required: Yes

### **Name**

Name for public key information summary.

Type: String

Required: Yes

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java](#)
- [AWS SDK for Ruby V2](#)

# QueryArgProfile

Query argument-profile mapping for field-level encryption.

## Contents

### ProfileId

ID of profile to use for field-level encryption query argument-profile mapping

Type: String

Required: Yes

### QueryArg

Query argument for field-level encryption query argument-profile mapping.

Type: String

Required: Yes

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java](#)
- [AWS SDK for Ruby V2](#)

# QueryArgProfileConfig

Configuration for query argument-profile mapping for field-level encryption.

## Contents

### **ForwardWhenQueryArgProfileIsUnknown**

Flag to set if you want a request to be forwarded to the origin even if the profile specified by the field-level encryption query argument, fle-profile, is unknown.

Type: Boolean

Required: Yes

### **QueryArgProfiles**

Profiles specified for query argument-profile mapping for field-level encryption.

Type: [QueryArgProfiles \(p. 286\)](#) object

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java](#)
- [AWS SDK for Ruby V2](#)

# QueryArgProfiles

Query argument-profile mapping for field-level encryption.

## Contents

### Items

Number of items for query argument-profile mapping for field-level encryption.

Type: Array of [QueryArgProfile \(p. 284\)](#) objects

Required: No

### Quantity

Number of profiles for query argument-profile mapping for field-level encryption.

Type: Integer

Required: Yes

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java](#)
- [AWS SDK for Ruby V2](#)

# QueryStringCacheKeys

A complex type that contains information about the query string parameters that you want CloudFront to use for caching for a cache behavior.

## Contents

### Items

A list that contains the query string parameters that you want CloudFront to use as a basis for caching for a cache behavior. If `Quantity` is 0, you can omit `Items`.

Type: Array of strings

Required: No

### Quantity

The number of whitelisted query string parameters for a cache behavior.

Type: Integer

Required: Yes

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java](#)
- [AWS SDK for Ruby V2](#)

# Restrictions

A complex type that identifies ways in which you want to restrict distribution of your content.

## Contents

### **GeoRestriction**

A complex type that controls the countries in which your content is distributed. CloudFront determines the location of your users using MaxMind GeoIP databases.

Type: [GeoRestriction \(p. 254\)](#) object

Required: Yes

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java](#)
- [AWS SDK for Ruby V2](#)

# S3Origin

A complex type that contains information about the Amazon S3 bucket from which you want CloudFront to get your media files for distribution.

## Contents

### DomainName

The DNS name of the Amazon S3 origin.

Type: String

Required: Yes

### OriginAccessIdentity

The CloudFront origin access identity to associate with the distribution. Use an origin access identity to configure the distribution so that end users can only access objects in an Amazon S3 bucket through CloudFront.

If you want end users to be able to access objects using either the CloudFront URL or the Amazon S3 URL, specify an empty `OriginAccessIdentity` element.

To delete the origin access identity from an existing distribution, update the distribution configuration and include an empty `OriginAccessIdentity` element.

To replace the origin access identity, update the distribution configuration and specify the new origin access identity.

For more information, see [Using an Origin Access Identity to Restrict Access to Your Amazon S3 Content](#) in the *Amazon CloudFront Developer Guide*.

Type: String

Required: Yes

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java](#)
- [AWS SDK for Ruby V2](#)

# S3OriginConfig

A complex type that contains information about the Amazon S3 origin. If the origin is a custom origin, use the `CustomOriginConfig` element instead.

## Contents

### OriginAccessIdentity

The CloudFront origin access identity to associate with the origin. Use an origin access identity to configure the origin so that viewers can *only* access objects in an Amazon S3 bucket through CloudFront. The format of the value is:

`origin-access-identity/cloudfront/ID-of-origin-access-identity`

where `ID-of-origin-access-identity` is the value that CloudFront returned in the `ID` element when you created the origin access identity.

If you want viewers to be able to access objects using either the CloudFront URL or the Amazon S3 URL, specify an empty `OriginAccessIdentity` element.

To delete the origin access identity from an existing distribution, update the distribution configuration and include an empty `OriginAccessIdentity` element.

To replace the origin access identity, update the distribution configuration and specify the new origin access identity.

For more information about the origin access identity, see [Serving Private Content through CloudFront](#) in the *Amazon CloudFront Developer Guide*.

Type: String

Required: Yes

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java](#)
- [AWS SDK for Ruby V2](#)

# Signer

A complex type that lists the AWS accounts that were included in the `TrustedSigners` complex type, as well as their active CloudFront key pair IDs, if any.

## Contents

### **AwsAccountNumber**

An AWS account that is included in the `TrustedSigners` complex type for this distribution. Valid values include:

- `self`, which is the AWS account used to create the distribution.
- An AWS account number.

Type: String

Required: No

### **KeyPairIds**

A complex type that lists the active CloudFront key pairs, if any, that are associated with `AwsAccountNumber`.

Type: [KeyPairIds \(p. 263\)](#) object

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java](#)
- [AWS SDK for Ruby V2](#)

# StatusCodes

A complex data type for the status codes that you specify that, when returned by a primary origin, trigger CloudFront to failover to a second origin.

## Contents

### Items

The items (status codes) for an origin group.

Type: Array of integers

Array Members: Minimum number of 1 item.

Required: Yes

### Quantity

The number of status codes.

Type: Integer

Required: Yes

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java](#)
- [AWS SDK for Ruby V2](#)

# StreamingDistribution

A streaming distribution tells CloudFront where you want RTMP content to be delivered from, and the details about how to track and manage content delivery.

## Contents

### ActiveTrustedSigners

A complex type that lists the AWS accounts, if any, that you included in the `TrustedSigners` complex type for this distribution. These are the accounts that you want to allow to create signed URLs for private content.

The `Signer` complex type lists the AWS account number of the trusted signer or `self` if the signer is the AWS account that created the distribution. The `Signer` element also includes the IDs of any active CloudFront key pairs that are associated with the trusted signer's AWS account. If no `KeyPairId` element appears for a `Signer`, that signer can't create signed URLs.

For more information, see [Serving Private Content through CloudFront](#) in the *Amazon CloudFront Developer Guide*.

Type: [ActiveTrustedSigners \(p. 198\)](#) object

Required: Yes

### ARN

The ARN (Amazon Resource Name) for the distribution. For example:

`arn:aws:cloudfront::123456789012:distribution/EDFDVBD632BHDS5`, where 123456789012 is your AWS account ID.

Type: String

Required: Yes

### DomainName

The domain name that corresponds to the streaming distribution, for example, `s5c39gqb8ow64r.cloudfront.net`.

Type: String

Required: Yes

### Id

The identifier for the RTMP distribution. For example: `EGTXBD79EXAMPLE`.

Type: String

Required: Yes

### LastModifiedTime

The date and time that the distribution was last modified.

Type: Timestamp

Required: No

### Status

The current status of the RTMP distribution. When the status is `Deployed`, the distribution's information is propagated to all CloudFront edge locations.

Type: String

Required: Yes

### **StreamingDistributionConfig**

The current configuration information for the RTMP distribution.

Type: [StreamingDistributionConfig \(p. 295\)](#) object

Required: Yes

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java](#)
- [AWS SDK for Ruby V2](#)

# StreamingDistributionConfig

The RTMP distribution's configuration information.

## Contents

### Aliases

A complex type that contains information about CNAMEs (alternate domain names), if any, for this streaming distribution.

Type: [Aliases \(p. 199\)](#) object

Required: No

### CallerReference

A unique value (for example, a date-time stamp) that ensures that the request can't be replayed.

If the value of `CallerReference` is new (regardless of the content of the `StreamingDistributionConfig` object), CloudFront creates a new distribution.

If `CallerReference` is a value that you already sent in a previous request to create a distribution, CloudFront returns a `DistributionAlreadyExists` error.

Type: String

Required: Yes

### Comment

Any comments you want to include about the streaming distribution.

Type: String

Required: Yes

### Enabled

Whether the streaming distribution is enabled to accept user requests for content.

Type: Boolean

Required: Yes

### Logging

A complex type that controls whether access logs are written for the streaming distribution.

Type: [StreamingLoggingConfig \(p. 302\)](#) object

Required: No

### PriceClass

A complex type that contains information about price class for this streaming distribution.

Type: String

Valid Values: `PriceClass_100` | `PriceClass_200` | `PriceClass_All`

Required: No

### S3Origin

A complex type that contains information about the Amazon S3 bucket from which you want CloudFront to get your media files for distribution.

Type: [S3Origin \(p. 289\)](#) object

Required: Yes

### TrustedSigners

A complex type that specifies any AWS accounts that you want to permit to create signed URLs for private content. If you want the distribution to use signed URLs, include this element; if you want the distribution to use public URLs, remove this element. For more information, see [Serving Private Content through CloudFront](#) in the *Amazon CloudFront Developer Guide*.

Type: [TrustedSigners \(p. 306\)](#) object

Required: Yes

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java](#)
- [AWS SDK for Ruby V2](#)

# StreamingDistributionConfigWithTags

A streaming distribution Configuration and a list of tags to be associated with the streaming distribution.

## Contents

### StreamingDistributionConfig

A streaming distribution Configuration.

Type: [StreamingDistributionConfig \(p. 295\)](#) object

Required: Yes

### Tags

A complex type that contains zero or more Tag elements.

Type: [Tags \(p. 305\)](#) object

Required: Yes

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java](#)
- [AWS SDK for Ruby V2](#)

# StreamingDistributionList

A streaming distribution list.

## Contents

### **IsTruncated**

A flag that indicates whether more streaming distributions remain to be listed. If your results were truncated, you can make a follow-up pagination request using the `Marker` request parameter to retrieve more distributions in the list.

Type: Boolean

Required: Yes

### **Items**

A complex type that contains one `StreamingDistributionSummary` element for each distribution that was created by the current AWS account.

Type: Array of [StreamingDistributionSummary \(p. 300\)](#) objects

Required: No

### **Marker**

The value you provided for the `Marker` request parameter.

Type: String

Required: Yes

### **MaxItems**

The value you provided for the `MaxItems` request parameter.

Type: Integer

Required: Yes

### **NextMarker**

If `IsTruncated` is `true`, this element is present and contains the value you can use for the `Marker` request parameter to continue listing your RTMP distributions where they left off.

Type: String

Required: No

### **Quantity**

The number of streaming distributions that were created by the current AWS account.

Type: Integer

Required: Yes

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java](#)
- [AWS SDK for Ruby V2](#)

# StreamingDistributionSummary

A summary of the information for a CloudFront streaming distribution.

## Contents

### Aliases

A complex type that contains information about CNAMEs (alternate domain names), if any, for this streaming distribution.

Type: [Aliases \(p. 199\)](#) object

Required: Yes

### ARN

The ARN (Amazon Resource Name) for the streaming distribution. For example:

`arn:aws:cloudfront::123456789012:streaming-distribution/EDFDVBD632BHDS5`,  
where 123456789012 is your AWS account ID.

Type: String

Required: Yes

### Comment

The comment originally specified when this distribution was created.

Type: String

Required: Yes

### DomainName

The domain name corresponding to the distribution, for example,  
`d111111abcdef8.cloudfront.net`.

Type: String

Required: Yes

### Enabled

Whether the distribution is enabled to accept end user requests for content.

Type: Boolean

Required: Yes

### Id

The identifier for the distribution, for example, `EDFDVBD632BHDS5`.

Type: String

Required: Yes

### LastModifiedTime

The date and time the distribution was last modified.

Type: Timestamp

Required: Yes

#### **PriceClass**

A complex type that contains information about price class for this streaming distribution.

Type: String

Valid Values: `PriceClass_100` | `PriceClass_200` | `PriceClass_All`

Required: Yes

#### **S3Origin**

A complex type that contains information about the Amazon S3 bucket from which you want CloudFront to get your media files for distribution.

Type: [S3Origin \(p. 289\)](#) object

Required: Yes

#### **Status**

Indicates the current status of the distribution. When the status is `Deployed`, the distribution's information is fully propagated throughout the Amazon CloudFront system.

Type: String

Required: Yes

#### **TrustedSigners**

A complex type that specifies the AWS accounts, if any, that you want to allow to create signed URLs for private content. If you want to require signed URLs in requests for objects in the target origin that match the `PathPattern` for this cache behavior, specify `true` for `Enabled`, and specify the applicable values for `Quantity` and `Items`. If you don't want to require signed URLs in requests for objects that match `PathPattern`, specify `false` for `Enabled` and `0` for `Quantity`. Omit `Items`. To add, change, or remove one or more trusted signers, change `Enabled` to `true` (if it's currently `false`), change `Quantity` as applicable, and specify all of the trusted signers that you want to include in the updated distribution.

For more information, see [Serving Private Content through CloudFront](#) in the *Amazon CloudFront Developer Guide*.

Type: [TrustedSigners \(p. 306\)](#) object

Required: Yes

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java](#)
- [AWS SDK for Ruby V2](#)

# StreamingLoggingConfig

A complex type that controls whether access logs are written for this streaming distribution.

## Contents

### Bucket

The Amazon S3 bucket to store the access logs in, for example, `myawslogbucket.s3.amazonaws.com`.

Type: String

Required: Yes

### Enabled

Specifies whether you want CloudFront to save access logs to an Amazon S3 bucket. If you don't want to enable logging when you create a streaming distribution or if you want to disable logging for an existing streaming distribution, specify `false` for `Enabled`, and specify empty `Bucket` and `Prefix` elements. If you specify `false` for `Enabled` but you specify values for `Bucket` and `Prefix`, the values are automatically deleted.

Type: Boolean

Required: Yes

### Prefix

An optional string that you want CloudFront to prefix to the access log filenames for this streaming distribution, for example, `myprefix/`. If you want to enable logging, but you don't want to specify a prefix, you still must include an empty `Prefix` element in the `Logging` element.

Type: String

Required: Yes

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java](#)
- [AWS SDK for Ruby V2](#)

# Tag

A complex type that contains Tag key and Tag value.

## Contents

### Key

A string that contains Tag key.

The string length should be between 1 and 128 characters. Valid characters include a–z, A–Z, 0–9, space, and the special characters \_ - . : / = + @.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: ^([\p{L}\p{Z}\p{N}\_.:=/+=\-\@]\*)\$

Required: Yes

### Value

A string that contains an optional Tag value.

The string length should be between 0 and 256 characters. Valid characters include a–z, A–Z, 0–9, space, and the special characters \_ - . : / = + @.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 256.

Pattern: ^([\p{L}\p{Z}\p{N}\_.:=/+=\-\@]\*)\$

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java](#)
- [AWS SDK for Ruby V2](#)

# TagKeys

A complex type that contains zero or more Tag elements.

## Contents

### Items

A complex type that contains Tag key elements.

Type: Array of strings

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: ^([\p{L}\p{Z}\p{N}\_.:/-+@\"]\*)\$

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java](#)
- [AWS SDK for Ruby V2](#)

# Tags

A complex type that contains zero or more Tag elements.

## Contents

### Items

A complex type that contains Tag elements.

Type: Array of [Tag \(p. 303\)](#) objects

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java](#)
- [AWS SDK for Ruby V2](#)

# TrustedSigners

A complex type that specifies the AWS accounts, if any, that you want to allow to create signed URLs for private content.

If you want to require signed URLs in requests for objects in the target origin that match the `PathPattern` for this cache behavior, specify `true` for `Enabled`, and specify the applicable values for `Quantity` and `Items`. For more information, see [Serving Private Content through CloudFront](#) in the *Amazon CloudFront Developer Guide*.

If you don't want to require signed URLs in requests for objects that match `PathPattern`, specify `false` for `Enabled` and `0` for `Quantity`. Omit `Items`.

To add, change, or remove one or more trusted signers, change `Enabled` to `true` (if it's currently `false`), change `Quantity` as applicable, and specify all of the trusted signers that you want to include in the updated distribution.

For more information about updating the distribution configuration, see [DistributionConfig](#) in the *Amazon CloudFront API Reference*.

## Contents

### Enabled

Specifies whether you want to require viewers to use signed URLs to access the files specified by `PathPattern` and `TargetOriginId`.

Type: Boolean

Required: Yes

### Items

**Optional:** A complex type that contains trusted signers for this cache behavior. If `Quantity` is `0`, you can omit `Items`.

Type: Array of strings

Required: No

### Quantity

The number of trusted signers for this cache behavior.

Type: Integer

Required: Yes

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java](#)
- [AWS SDK for Ruby V2](#)

# ViewerCertificate

A complex type that specifies the following:

- Whether you want viewers to use HTTP or HTTPS to request your objects.
- If you want viewers to use HTTPS, whether you're using an alternate domain name such as `example.com` or the CloudFront domain name for your distribution, such as `d11111abcdef8.cloudfront.net`.
- If you're using an alternate domain name, whether AWS Certificate Manager (ACM) provided the certificate, or you purchased a certificate from a third-party certificate authority and imported it into ACM or uploaded it to the IAM certificate store.

Specify only one of the following values:

- [ACMCertificateArn](#)
- [IAMCertificateId](#)
- [CloudFrontDefaultCertificate](#)

For more information, see [Using Alternate Domain Names and HTTPS](#) in the *Amazon CloudFront Developer Guide*.

## Contents

### **ACMCertificateArn**

If you want viewers to use HTTPS to request your objects and you're using an alternate domain name, you must choose the type of certificate that you want to use. Specify the following value if ACM provided your certificate:

```
<ACMCertificateArn>certificat_ARN<ACMCertificateArn>
```

where `certificat_ARN` is the ARN for the ACM SSL/TLS certificate that you want to use for this distribution.

If you specify `ACMCertificateArn`, you must also specify a value for `SSLSupportMethod`.

#### **Note**

If you're using AWS CloudFormation, be aware that you must use `AcmCertificateArn` instead of `ACMCertificateArn` (note the difference in capitalization) because of how the CloudFormation model is specified.

Type: String

Required: No

### **Certificate**

*This member has been deprecated.*

This field is no longer used. Use one of the following fields instead:

- [ACMCertificateArn](#)
- [IAMCertificateId](#)
- [CloudFrontDefaultCertificate](#)

Type: String

Required: No

#### CertificateSource

*This member has been deprecated.*

This field is no longer used. Use one of the following fields instead:

- [ACMCertificateArn](#)
- [IAMCertificateId](#)
- [CloudFrontDefaultCertificate](#)

Type: String

Valid Values: `cloudfront` | `iam` | `acm`

Required: No

#### CloudFrontDefaultCertificate

If you're using the CloudFront domain name for your distribution, such as `d111111abcdef8.cloudfront.net`, specify the following value:

- `<CloudFrontDefaultCertificate>true<CloudFrontDefaultCertificate>`

Type: Boolean

Required: No

#### IAMCertificateId

If you want viewers to use HTTPS to request your objects and you're using an alternate domain name, you must choose the type of certificate that you want to use. Specify the following value if you purchased your certificate from a third-party certificate authority:

`<IAMCertificateId>certificate_ID<IAMCertificateId>`

where `certificate_ID` is the ID that IAM returned when you added the certificate to the IAM certificate store.

If you specify `IAMCertificateId`, you must also specify a value for `SSLSupportMethod`.

##### Note

If you're using AWS CloudFormation, be aware that you must use `IamCertificateId` instead of `IAMCertificateId` (note the difference in capitalization) because of how the CloudFormation model is specified.

Type: String

Required: No

#### MinimumProtocolVersion

Specify the security policy that you want CloudFront to use for HTTPS connections. A security policy determines two settings:

- The minimum SSL/TLS protocol that CloudFront uses to communicate with viewers
- The cipher that CloudFront uses to encrypt the content that it returns to viewers

##### Note

On the CloudFront console, this setting is called **Security policy**.

We recommend that you specify `TLSv1.1_2016` unless your users are using browsers or devices that do not support TLSv1.1 or later.

When both of the following are true, you must specify `TLSv1` or later for the security policy:

- You're using a custom certificate: you specified a value for `ACMCertificateArn` or for `IAMCertificateId`
- You're using SNI: you specified `sni-only` for `SSLSupportMethod`

If you specify `true` for `CloudFrontDefaultCertificate`, CloudFront automatically sets the security policy to `TLSv1` regardless of the value that you specify for `MinimumProtocolVersion`.

For information about the relationship between the security policy that you choose and the protocols and ciphers that CloudFront uses to communicate with viewers, see [Supported SSL/TLS Protocols and Ciphers for Communication Between Viewers and CloudFront](#) in the *Amazon CloudFront Developer Guide*.

Type: String

Valid Values: `SSLv3` | `TLSv1` | `TLSv1_2016` | `TLSv1.1_2016` | `TLSv1.2_2018`

Required: No

#### SSLSupportMethod

If you specify a value for `ACMCertificateArn` or for `IAMCertificateId`, you must also specify how you want CloudFront to serve HTTPS requests: using a method that works for browsers and clients released after 2010 or one that works for all clients.

- `sni-only`: CloudFront can respond to HTTPS requests from viewers that support Server Name Indication (SNI). All modern browsers support SNI, but there are a few that don't. For a current list of the browsers that support SNI, see the [Wikipedia entry Server Name Indication](#). To learn about options to explore if you have users with browsers that don't include SNI support, see [Choosing How CloudFront Serves HTTPS Requests](#) in the *Amazon CloudFront Developer Guide*.
- `vip`: CloudFront uses dedicated IP addresses for your content and can respond to HTTPS requests from any viewer. However, there are additional monthly charges. For details, including specific pricing information, see [Custom SSL options for Amazon CloudFront](#) on the AWS marketing site.

Don't specify a value for `SSLSupportMethod` if you specified `<CloudFrontDefaultCertificate>true<CloudFrontDefaultCertificate>`.

#### Note

If you're using AWS CloudFormation, be aware that you must use `SslSupportMethod` instead of `SSLSupportMethod` (note the difference in capitalization) because of how the CloudFormation model is specified.

For more information, see [Choosing How CloudFront Serves HTTPS Requests](#) in the *Amazon CloudFront Developer Guide*.

Type: String

Valid Values: `sni-only` | `vip`

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java](#)
- [AWS SDK for Ruby V2](#)

# Common Parameters

The following list contains the parameters that all actions use for signing Signature Version 4 requests with a query string. Any action-specific parameters are listed in the topic for that action. For more information about Signature Version 4, see [Signature Version 4 Signing Process](#) in the *Amazon Web Services General Reference*.

## Action

The action to be performed.

Type: string

Required: Yes

## Version

The API version that the request is written for, expressed in the format YYYY-MM-DD.

Type: string

Required: Yes

## X-Amz-Algorithm

The hash algorithm that you used to create the request signature.

Condition: Specify this parameter when you include authentication information in a query string instead of in the HTTP authorization header.

Type: string

Valid Values: AWS4-HMAC-SHA256

Required: Conditional

## X-Amz-Credential

The credential scope value, which is a string that includes your access key, the date, the region you are targeting, the service you are requesting, and a termination string ("aws4\_request"). The value is expressed in the following format: *access\_key/YYYYMMDD/service/aws4\_request*.

For more information, see [Task 2: Create a String to Sign for Signature Version 4](#) in the *Amazon Web Services General Reference*.

Condition: Specify this parameter when you include authentication information in a query string instead of in the HTTP authorization header.

Type: string

Required: Conditional

## X-Amz-Date

The date that is used to create the signature. The format must be ISO 8601 basic format (YYYYMMDD'T'HHMMSS'Z'). For example, the following date time is a valid X-Amz-Date value: 20120325T120000Z.

Condition: X-Amz-Date is optional for all requests; it can be used to override the date used for signing requests. If the Date header is specified in the ISO 8601 basic format, X-Amz-Date is

not required. When X-Amz-Date is used, it always overrides the value of the Date header. For more information, see [Handling Dates in Signature Version 4](#) in the *Amazon Web Services General Reference*.

Type: string

Required: Conditional

**X-Amz-Security-Token**

The temporary security token that was obtained through a call to AWS Security Token Service (AWS STS). For a list of services that support temporary security credentials from AWS Security Token Service, go to [AWS Services That Work with IAM](#) in the *IAM User Guide*.

Condition: If you're using temporary security credentials from the AWS Security Token Service, you must include the security token.

Type: string

Required: Conditional

**X-Amz-Signature**

Specifies the hex-encoded signature that was calculated from the string to sign and the derived signing key.

Condition: Specify this parameter when you include authentication information in a query string instead of in the HTTP authorization header.

Type: string

Required: Conditional

**X-Amz-SignedHeaders**

Specifies all the HTTP headers that were included as part of the canonical request. For more information about specifying signed headers, see [Task 1: Create a Canonical Request For Signature Version 4](#) in the *Amazon Web Services General Reference*.

Condition: Specify this parameter when you include authentication information in a query string instead of in the HTTP authorization header.

Type: string

Required: Conditional

# Common Errors

This section lists the errors common to the API actions of all AWS services. For errors specific to an API action for this service, see the topic for that API action.

## **AccessDeniedException**

You do not have sufficient access to perform this action.

HTTP Status Code: 400

## **IncompleteSignature**

The request signature does not conform to AWS standards.

HTTP Status Code: 400

## **InternalFailure**

The request processing has failed because of an unknown error, exception or failure.

HTTP Status Code: 500

## **InvalidAction**

The action or operation requested is invalid. Verify that the action is typed correctly.

HTTP Status Code: 400

## **InvalidClientId**

The X.509 certificate or AWS access key ID provided does not exist in our records.

HTTP Status Code: 403

## **InvalidParameterCombination**

Parameters that must not be used together were used together.

HTTP Status Code: 400

## **InvalidParameterValue**

An invalid or out-of-range value was supplied for the input parameter.

HTTP Status Code: 400

## **InvalidQueryParameter**

The AWS query string is malformed or does not adhere to AWS standards.

HTTP Status Code: 400

## **MalformedQueryString**

The query string contains a syntax error.

HTTP Status Code: 404

## **MissingAction**

The request is missing an action or a required parameter.

HTTP Status Code: 400

**MissingAuthenticationToken**

The request must contain either a valid (registered) AWS access key ID or X.509 certificate.

HTTP Status Code: 403

**MissingParameter**

A required parameter for the specified action is not supplied.

HTTP Status Code: 400

**OptInRequired**

The AWS access key ID needs a subscription for the service.

HTTP Status Code: 403

**RequestExpired**

The request reached the service more than 15 minutes after the date stamp on the request or more than 15 minutes after the request expiration date (such as for pre-signed URLs), or the date stamp on the request is more than 15 minutes in the future.

HTTP Status Code: 400

**ServiceUnavailable**

The request has failed due to a temporary failure of the server.

HTTP Status Code: 503

**ThrottlingException**

The request was denied due to request throttling.

HTTP Status Code: 400

**ValidationException**

The input fails to satisfy the constraints specified by an AWS service.

HTTP Status Code: 400