Geo-block Wowza CDN on Akamai stream targets with the Wowza Streaming Cloud REST API

The Wowza Streaming Cloud™ service allows you to selectively allow or block access to Wowza CDN on Akamai stream targets so that you can control where a stream can be viewed. Learn how to use the REST API to control the locations where your stream can be viewed.

**Note:** This article applies to Wowza CDN on Akamai stream targets only. To secure Wowza CDN on Fastly stream targets with geo-blocking, see Geo-block Wowza CDN on Fastly stream targets with the Wowza Streaming Cloud REST API.

Add a Wowza CDN on Akamai stream target for HLS playback

**Important:** Geoblocking for Wowza CDN on Akamai stream targets is available in v1.3 of the Wowza Streaming Cloud REST API only. The feature is not available for Wowza CDN on Akamai targets in v1.4 and later.

First, add a Wowza CDN on Akamai stream target configured to play streams from Wowza CDN over HLS or HLS and HDS.

Stream target parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Data Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>name</td>
<td>string</td>
<td>A descriptive name for the stream target. Maximum 255 characters.</td>
</tr>
<tr>
<td><strong>provider</strong></td>
<td><strong>string</strong></td>
<td>Specify akamai_cupertino (for HLS-only playback) or akamai (for HLS and HDS playback).</td>
</tr>
<tr>
<td>----------------</td>
<td>------------</td>
<td>------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>use_cors</strong></td>
<td><strong>Boolean</strong></td>
<td>(Optional) CORS, or cross-origin resource sharing, allows streams to be safely delivered across domains. For example, they can be sent to providers such as Peer5, Viblast, and Streamroot, which implement a peer-to-peer grid delivery system. Specify true to enable CORS. The default is false. Available if the provider is akamai_cupertino.</td>
</tr>
<tr>
<td><strong>use_secure_ingest</strong></td>
<td><strong>Boolean</strong></td>
<td>(Optional) Specify true to deliver the HLS stream securely between the transcoder and the target. The default is false. Available if the provider is akamai_cupertino.</td>
</tr>
</tbody>
</table>

**Example request and response**

The following request generates a Wowza stream target for HLS playback:

```
curl -X POST \
-H "Content-Type: application/json" \
-H "wsc-api-key: ${WSC_API_KEY}" \
-H "wsc-access-key: ${WSC_ACCESS_KEY}" \
-d '{"stream_target_wowza": { 
  "name": "MyHLSTarget",
  "provider": "akamai_cupertino"
 }}' 
"${WSC_HOST}/api/${WSC_VERSION}/stream_targets/wowza"
```

The details of the configured target are listed in the response, which should look something like this:
Create a geo-block for the target

Create a geo-block for the HDS/HLS Wowza stream target.

Geo-block parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Data Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>countries</td>
<td>array of strings</td>
<td>The locations affected by the geo-block. Enter a comma-separated list of two-letter ISO 3166-1 country codes. For a list of codes, see ISO 3166-1 on Wikipedia.</td>
</tr>
<tr>
<td>type</td>
<td>string</td>
<td>Geo-blocks can permit or prohibit viewing of a stream target. The value <strong>allow</strong> permits viewing only in the locations specified by the <code>countries</code> parameter. The value <strong>deny</strong> prohibits viewing in the locations specified by the <code>countries</code> parameter. The value <strong>disabled</strong> permits viewing everywhere.</td>
</tr>
<tr>
<td>whitelist</td>
<td>string</td>
<td>Whitelisted addresses can be viewed even if they’re within a geo-blocked location. Enter a comma-separated list of IP addresses that always allow streaming.</td>
</tr>
</tbody>
</table>
Note: You can block or whitelist a total of up to about 22 countries and IP addresses.

Example request and response

The following request allows only the United States and Germany as well as the IP addresses 1.2.3.4 and 9.8.7.6 to view a stream at the target 1234abcd:

```
curl -X POST \
-H "Content-Type: application/json" \
-H "wsc-api-key: ${WSC_API_KEY}" \
-H "wsc-access-key: ${WSC_ACCESS_KEY}" \
-d '{
  "geoblock": {
    "countries": ["de","us"],
    "type": "allow",
    "whitelist": ["1.2.3.4","9.8.7.6"]
  }
}' "${WSC_HOST}/api/${WSC_VERSION}/stream_targets/1234abcd/geoblock"
```

The details of the configured geo-block are listed in the response, which should look something like this:

```
{
  "geoblock": {
    "countries": [
      "de",
      "us"
    ],
    "created_at": "2016-02-23T16:04:22.828Z",
    "stream_target_id": "1234abcd",
    "type": "allow",
    "updated_at": "2016-02-23T16:04:22.828Z",
    "whitelist": [
      "1.2.3.4",
      "9.8.7.6"
    ]
  }
}
```

Important: After configuring geo-blocking, you must contact Support in order for the changes to take effect.
Related requests

View the details of a geo-block:

curl -X GET \
-H "wsc-api-key: ${WSC_API_KEY}" \
-H "wsc-access-key: ${WSC_ACCESS_KEY}" \
"${WSC_HOST}/api/${WSC_VERSION}/stream_targets/[wowza_stream_target_id]/geoblock"

Update a geo-block’s configuration:

curl -X PATCH \
-H "Content-Type: application/json" \
-H "wsc-api-key: ${WSC_API_KEY}" \
-H "wsc-access-key: ${WSC_ACCESS_KEY}" \
-d '{   "geoblock": {     "type": "deny",     "countries": ["de","us"]   } }' "${WSC_HOST}/api/${WSC_VERSION}/stream_targets/[wowza_stream_target_id]/geoblock"

**Important:** After updating geo-blocking, you must contact Support in order for the changes to take effect.

Delete a geo-block:

curl -X PUT \
-H "Content-Type: application/json" \
-H "wsc-api-key: ${WSC_API_KEY}" \
-H "wsc-access-key: ${WSC_ACCESS_KEY}" \
-d '{   "geoblock": {     "type": "disabled"   } }' "${WSC_HOST}/api/${WSC_VERSION}/stream_targets/[wowza_stream_target_id]/geoblock"

**Important:** After disabling geo-blocking, you must contact Support in order for the changes to take effect.
Assign the stream target to a transcoder

Assign the geo-blocked stream target to a transcoder’s output rendition.

Add stream target parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Data Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>id</td>
<td>string</td>
<td>The unique alphanumeric string that identifies the output rendition that will deliver content to the stream target. You can find the ID in the details of the output’s transcoder.</td>
</tr>
<tr>
<td>stream_target_id</td>
<td>string</td>
<td>The unique alphanumeric string that identifies the stream target. You can find the ID in the details of the Wowza stream target you just created.</td>
</tr>
<tr>
<td>transcoder_id</td>
<td>string</td>
<td>The unique alphanumeric string that identifies the transcoder.</td>
</tr>
</tbody>
</table>

Example request and response

The following request adds the geo-blocked stream target **1234abcd** to the output rendition whose ID is **5678efgh** for the transcoder **9012ijkl**.

```bash
curl -X POST \
-H "Content-Type: application/json" \
-H "wsc-api-key: ${WSC_API_KEY}" \
-H "wsc-access-key: ${WSC_ACCESS_KEY}" \
-d '{
    "output_stream_target":{
        "stream_target_id": "1234abcd",
        "use_stream_target_backup_url": false
    }
}'} "${WSC_HOST}/api/${WSC_VERSION}/transcoders/9012ijkl/outputs/5678efgh/output_stream_targets/" 
```

The details of the configured target are listed in the response, which should look something like this:
Security features in Wowza Streaming Cloud