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Testing Playback of Encrypted Content - Universal DRM

Overview

To test the playback of encrypted content, use the Manifest URL that was created during the encryption process.

https://yourmanifestURL/manifest.mpd

To test playback, you will also need your Proxy URL from the DRM generated keys, which will be defined in more detail in the following sections.
Widevine over DASH (EZDRM Universal)

Widevine Proxy URL

The Widevine Proxy URL has two parts, the first is the base URL with your account PX value.

The base URL is: https://widevine-dash.ezdrm.com/proxy?pX=XXXXXX

The px value is the last 6 digits highlighted in yellow above.

PX Value

The px value is branded for your account and is account specific. Your PX value is always the same no matter what packager you are using.

It is the last six characters of your EZDRM Profile ID, as shown in this example:

1. Login to your EZDRM.com account

2. Under “My Account” click on the link to My Widevine Account under Widevine DRM.
3. The last 6 digits of your Widevine Profile ID is your PX Number.
Widevine Proxy URL for AWS, Anevia and Nimble Streamer

The Widevine authentication URL is the same for all packagers except for AWS, Anevia and Nimble Streamer. They have a different license proxy URL, but the PX value is always the same value assigned to your account.

The same last 6 digits of your account will be added as the px value. The base URL is as follows:

Widevine Auth URL

The EZDRM system passes several values by default to your Authorization URL:

- Client_ip of the end client
- pX is your EZDRM specific PX value for your account
- Custom Data is added to the end of the string (this will be described in more detail in the next section)

Here is an example of the EZDRM return post to your Authorization URL:

https://AUTHUTRL/PlayValue.asp?p1=1&response="status":"OK","supported_tracks ":[],"internal_status":127,"client_info":[]"done","client_ip":"46.200.40.005"&pX=XXX XXX&CustomData=123

You can find and edit your authorization URL by logging into your EZDRM account, under “My Account” click on the link to My Widevine Account under Widevine DRM.
Custom Data (Optional)
This additional configuration to your Widevine Proxy URL will pass additional business logic for license validation.

As part of the licensing process, the content owner can pass a set of parameters through the EZDRM system in order to use that information within the business logic. These parameters should be attached to the server URL. The server URL will include your PX value and all of the other values should follow:


Sample Player for Widevine over DASH
An example playback player for Widevine Universal content is the Shaka Player found here: https://shaka-player-demo.appspot.com/demo/

Widevine uses Chrome and Firefox web browsers.

Note: all calls must be over https.

1. Select the (custom asset) option from the Asset dropdown:
2. To use the player for testing you’ll need to edit the following:
   - The **Manifest URL** for the packaged MPD

   - The **Proxy URL** - The Widevine **ServerURL** value from the EZDRM Encryption Key file.
3. Click the Load button to see the test playback:
Shaka Player v2.4.5-uncompiled

uncompiled | compiled (debug) | compiled (release)

This is a demo of Google’s Shaka Player, a JavaScript library for adaptive video streaming. Choose an asset and tap Load. (On Android, you may also need to press the play button on the video.)

Documentation | Repo | NPM | CDNJS

Asset: (custom asset)

Custom manifest: https://wowza.ezdrm.com/vod/mp4:sample.mp4/r

Custom license server: https://widevine-dash.ezdrm.com/proxy?pX=XXXX

Custom license certificate URL:

Load  Unload
When testing playback, you can also test sending your Custom Data. Enter the Custom Data as part of the Proxy URL as shown in the URL above and the example below:
PlayReady over DASH (EZDRM Universal)

**Proxy URL**

The PlayReady Proxy URL has two parts, the first is the base URL with your account PX value.


The px value is the last 6 digits highlighted in yellow above.

**PX Value**

The **px value** is branded for your account and is account specific. Your PX value is always the same no matter what packager you are using.

It is the last six characters of your EZDRM Profile ID, as shown in this example:

1. Login to your EZDRM.com account

2. Under “My Account” click on the link to **My PlayReady Account** under PlayReady DRM.

3. The last 6 digits of your PlayReady Profile ID is your PX Number.
PlayReady Auth URL

The EZDRM system passes several values by default to your authorization URL:

- The IP address of the end client
- EZDRM TOKEN, this is for EZDRM use only
- PX value, this is your EZDRM specific PX value for your account
- Custom Data is added to the end of the string (see next section)

Here is an example of the EZDRM return post to your auth URL:

https://Your_URL.com/auth?IP=10.10.10.10&token=5060ac27-52a7-0151-2bc4-da9055cb0af8&CustomData=samplecustomdata
pX=123456

**Note:** Custom Data is discussed in more detail in the next section. There is a line break after Custom Data where the PX value is returned.

You can find and edit your authorization URL by logging into your EZDRM account, under “My Account” click on the link to My PlayReady Account under PlayReady DRM.
Custom Data (Optional)
This additional configuration to your PlayReady Proxy URL will pass additional business logic for license validation.

You can pass custom logic to your authentication URL by adding your own values to the end of your PlayReady LAURL, as follows:


Depending on your DASH Player, such as the Bitmovin player that has a Custom Data value that uses a Microsoft Custom Data element, you can either use this object or pass custom data via adding values to your PlayReady License Acquisition URL (LA_URL). This is the PlayReady LAURL value that is in returned in your packaging XML license values.

Sample Player for PlayReady over DASH
An example playback player for PlayReady DASH content is the Shaka Player found here: https://shaka-player-demo.appspot.com/demo/
Microsoft PlayReady uses IE and Edge web browsers.

*Note: all calls must be over https.*

1. Select the **(custom asset)** option from the **Asset** dropdown:

2. To use the player for testing you’ll need to edit the following:
   - The **Manifest URL** for the packaged MPD
   - The **Proxy URL** - The PlayReady **LAURL** value from the EZDRM Encryption Key file.
3. Click the Load button to see the test playback:
When testing playback, you can also test sending your Custom Data. Enter the Custom Data as part of the Proxy URL as shown in the URL above and the example below:
Shaka Player v2.4.6-debug

uncompiled | compiled (debug) | compiled (release)

This is a demo of Google's Shaka Player, a JavaScript library for adaptive video streaming.
Choose an asset and tap Load. (On Android, you may also need to press the play button on the video.)

Asset: (custom asset)
Custom manifest: https://wowza.ezdrm.com/vod/mp4:sample.mp4/
Custom license server: ency/preauth.aspx?pX=E01XXF&CustomData= X
Custom license certificate URL:

Load  Unload
Sample Player for PlayReady over Microsoft Smooth Streaming

An example playback player for PlayReady over Microsoft Smooth Streaming can be found here: https://test.playready.microsoft.com/Tool/PlayerHAS

Microsoft PlayReady uses IE and Edge web browsers.

*Note: all calls must be over https.*

1. To use the player for testing you’ll need to edit the following:
   - **Content Manifest:** enter your Manifest URL
   - **License Service:** The Proxy URL - The PlayReady LAURL value from the EZDRM Encryption Key file

2. Select **HTML5** or **Silverlight Player** and click the **Play** button.
Apple FairPlay Streaming over HLS

Apple FairPlay uses SPCPath. This the base URL is: https://fps.ezdrm.com/api/licenses/AssetID

**EZDRM FairPlay Account**

**Asset ID**
To access your FPS asset IDs, log in to your EZDRM account. Under **FairPlay DRM**, select **FPS Asset IDs**, the IDs will be listed by date created. For AWS and Anevia asset IDs, select **AWS Resource / Asset IDs**.

![Asset ID Table]

**Authorization URL**
To access your authorization URL for Apple FairPlay, log in to your EZDRM account. Under **My Account**, Select **My FPS Authorization URL**.
Passing Custom Data

As part of the licensing process, the content owner can pass a set of parameters through the EZDRM system in order to use that information within the business logic. These parameters should be attached to the server URL provided above.

This is an example in the HTML player:

```javascript
var serverProcessSPCPath = '<<FPS PATH TO LICENSE SERVER>>/api/licenses/<<ASSET ID>>?<<KEY1>>=<<VALUE1>>&
<<KEY2>>=<<VALUE2>>';
var serverProcessSPCPath = 'http://fps.ezdrm.com/api/licenses/09cc0377-6dd4-40cb-b09d-XXXXXXXX?CustomValue1=Value1?CustomValue2=Value2';
```

The EZDRM system passes several values by default to your Authorization URL:
- The FPS License Server Path
- AssetID – changes per the asset; the AssetID is generated during DRM key generation. Asset IDs can be found under FairPlay DRM in your EZDRM account by date created.
- Custom Data values
- The Client IP of the end client is added to the end of the string

Here is an example of the EZDRM return post to your Authorization URL:

```
https://fps.ezdrm.com/api/licenses/09cc0377-6dd4-40cb-b09d-XXXXXXXX?customdata=123?customdata=345&ClientIP=12.34.567.89
```
**Sample Players for Apple FairPlay Streaming**

For an iOS offline example, you can download using this link: [https://www.ezdrm.com/downloads/fps-ios-demo-updates-3.zip](https://www.ezdrm.com/downloads/fps-ios-demo-updates-3.zip)

To use the player for testing in Safari you'll need to:
- Edit the Cert file
- Edit the M3U8

Another player example can be found using this link: [https://developer.jwplayer.com/tools/stream-tester/](https://developer.jwplayer.com/tools/stream-tester/)
Enter the following parameters to test playback:

- **FILE URL** – this is the stream URL to test
- **Certificate URL** – the Certificate URL for your stream
- **Process SPC URL** – this is the SPC Base URL with your AssetID.

Enter the parameters and click the **Test Stream** button.