

# **StreamLive**

## **Best Practice**

### **Product Documentation**



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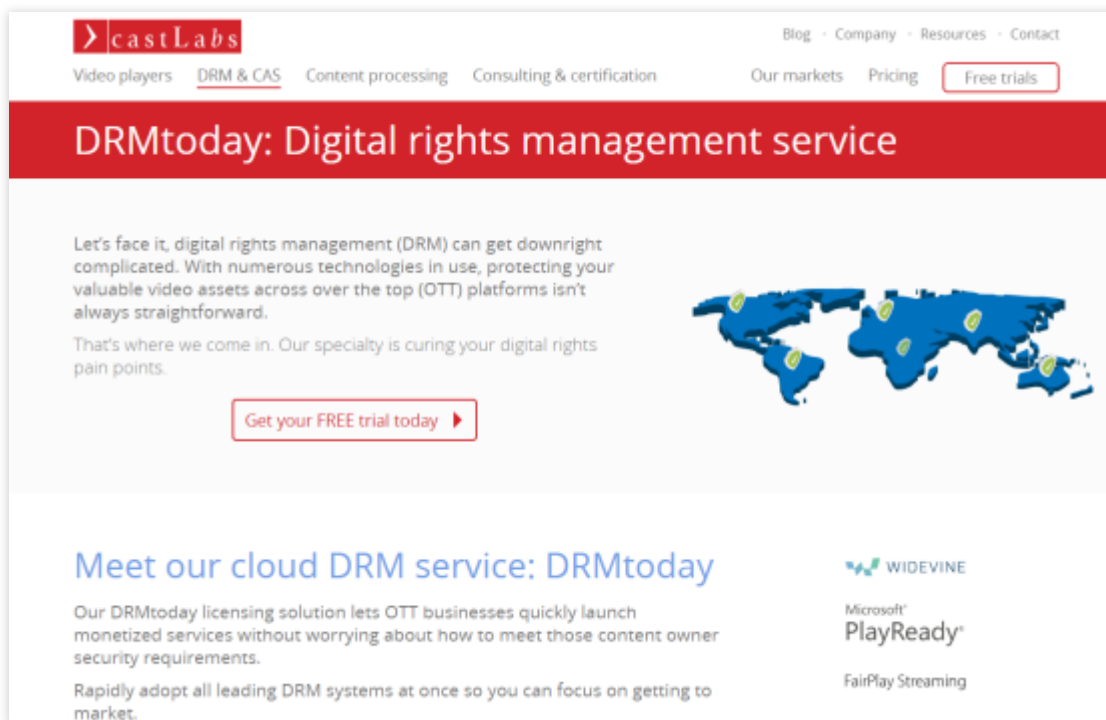
# Best Practice

Last updated : 2021-08-23 17:23:00

## Step 1. Apply for an account.

### 1. Sign up for a DRMtoday account.

- i. Sign up for a DRMtoday account on the [DRMtoday product page](#).

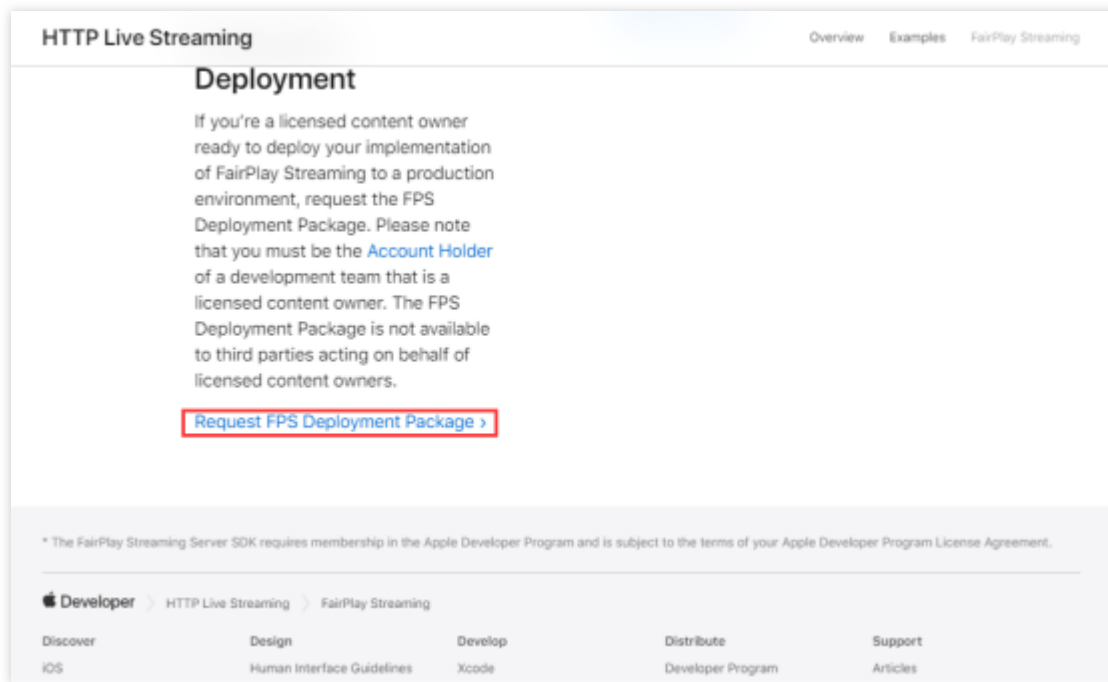


- ii. After signing up, you will receive a DRMtoday account, along with the password and the dashboard address.

### 2. Request a FairPlay certificate.

- i. Go to the [Apple FairPlay official website](#).

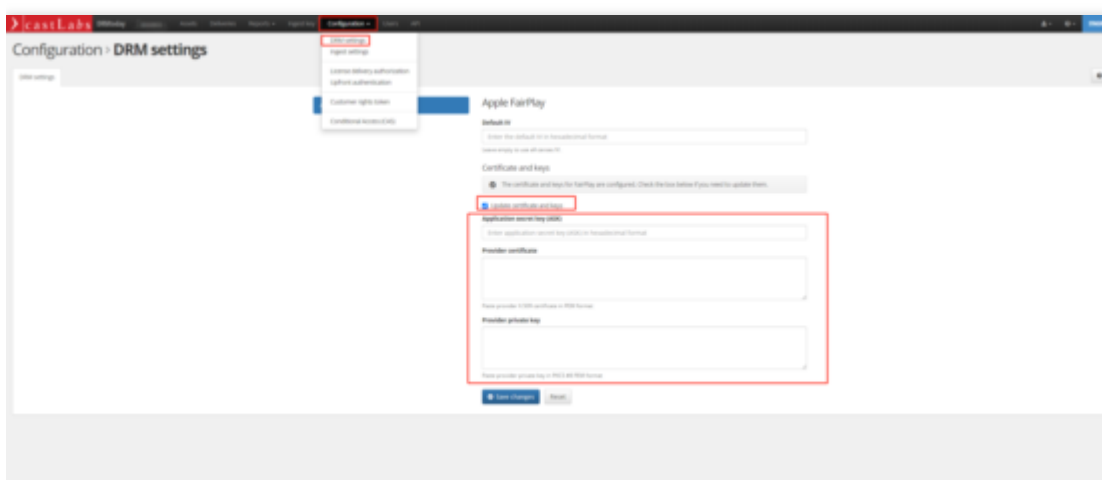
- ii. Click [Request FPS Deployment Package](#), enter and submit the information required.



- iii. Get the `FPS_Deployment_Package.zip` file.
- iv. Decompress the file and create a local password-protected private key and CSR (certificate signing request) as described in the file.
- v. Submit the CSR to Apple as described in the file, and an application secret key (ASK) will be returned. Store it properly.
- vi. Download the FairPlay certificate generated.

## Step 2. Upload FairPlay certificate to DRMtoday.

Go to the DRMtoday dashboard, and select **Configuration > DRM Settings**.



Parameters:

- **Default IV:** leave it empty.

Check **Update certificate and keys**, and set the parameters as described below.

- **ASK:** the ASK obtained in step 1.2.5 in the hexadecimal format.
- **Provider certificate:** the FairPlay certificate downloaded in step 1.2.6. The certificate uploaded must be a PEM file. You can convert your certificate into a PEM file using OpenSSL on Linux. For example, for a certificate named `fairplay.cer`, the command for conversion is:

```
openssl x509 -inform der -in fairplay.cer -out fairplay.pem
```

- **Provider private key:** the password-protected private key created. The key must be in the PKCS#8 PEM format. You can convert a key into the required format using OpenSSL on Linux. For example, for a key file named `privatekey.pem`, the command for conversion is:

```
openssl rsa -in privatekey.pem -outform PEM -out out.pem
```

## Step 3. Configure Widevine or FairPlay key via DRMtoday API.

The operations in this step are based on DRMtoday's official document [DRMtoday Key Ingestion](#).

### 1. CAS authentication

DRMtoday uses CAS (Central Authentication Service) to protect its API from unauthorized access. For details, see [DRMtoday CAS Authentication](#).

- i. CAS login: send a HTTP POST request to the login address.

Example:

```
curl -v 'https://auth.staging.drmtoday.com/cas/v1/tickets' -H 'Content-Type: application/x-www-form-urlencoded' -XPOST -d 'username=${username}&password=${password}'
```

Parameters:

- **username and password:** you may use your DRMtoday account and password or the API account and password created at DRMtoday. For details, see DRMtoday's [document on API account creation](#).
- ii. CAS ticket retrieval: send a HTTP POST request to the location in the header of the response of the CAS login request.

Example:

```
curl -v 'https://auth.staging.drmtoday.com/cas/v1/tickets/xxx' -H 'Content-Type: application/x-www-form-urlencoded' -XPOST -d 'service=https://fe.staging.drmtoday.com/frontend/api/keys/v2/ingest/${merchantApiName}'
```

Parameters:

- **service:** the endpoint corresponding to the ingest key in *\*Dashboard > API \**.



## 2. Key setting.

After authentication, use the ingest key API to configure a Widevine or FairPlay key. For how to use the API, see [DRMtoday Key Ingestion](#).

Example:

```
curl -v 'https://fe.staging.drmtoday.com/frontend/api/keys/v2/ingest/${merchant}?ticket=${ticket}' -H 'Content-Type: application/json' -H 'Accept: application/json' -XPOST -d '{"assets": [{"type": "CENC", "assetId": "assettest", "variantId": "varianttest", "ingestKeys": [{"streamType": "VIDEO_AUDIO", "algorithm": "AES", "keyId": "MDAwMDAwMDAwMDAwMDAwMA==", "key": "MDAwMDAwMDAwMDAwMDAwMA==", "iv": "MDAwMDAwMDAwMDAwMDAwMA=="}]}]}'
```

Parameters:

- **merchant:** the endpoint corresponding to the ingest key in the dashboard.
- **ticket:** the body of the response returned upon CAS ticket retrieval.
- **type:** CENC , which supports Widevine and FairPlay. Widevine encryption requires a **keyId** and **key** , and FairPlay encryption requires a **key** and **iv** .
- **keyId, key and iv:** must be encoded in the Base64 format. For example, **MDAwMDAwMDAwMDAwMDAwMA==** is '30303030303030303030303030303030' after converted into the hexadecimal format.

## Step 4. Configure DRM key with StreamLive.

Follow the instructions in the StreamLive [user guide]([Console Guide | Tencent Cloud](#)) to configure a StreamLive DRM key. See below for the settings.

- FairPlay key:

[illegible]

- Widevine key:

DRM

DRM

Tencent DRM

Custom DRM Keys

Content Id \*

assettest

DRM Type

Widevine

Track setting

All Track


Select Track

Track Type	KeyId	Key	Operation
All Track	30303030303030303030303030303030	30303030303030303030303030303030	Confirm

- ## Step 5. Run playback test.

After configuring a playback address as instructed in the StreamLive user guide (for example, you can [ingest live streams to the StreamPackage channel](#), and [get the playback address via the StreamPackage endpoint](#), you can use the [DRMtoday playback page](#) to run a playback test.

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Rendition	1280x720@2Mbps		
State	PLAYING		
Protection	Google Widevine		
Time to prepare	0.297s		
UTC	12:56:57 CURRENT UTC	12:56:33 PLAYHEAD UTC	24.338s BEHIND
Buffering	1.255s LAST	3.618s SUM	2 NUM

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[SAVE AND LOAD](#)
[SHOW JSON](#)
[▶ LOAD](#)


**Content URL**

The source URL to your Manifest.

**Type**

The source type.

DRM



PRESTOplay works seamlessly with our scalable **DRMtoday** cloud licensing service. If you'd like to test your own protected content just request a [free DRM trial account](#).

**DRM Environment**

**Merchant**

**User ID**

**Session ID**

**Auth Token**

**Asset ID**

**Variant ID**

Parameters:

- **Content URL:** the playback content URL
- **DRM Environment:** the DRM environment you use
- **Merchant:** name of the user at DRMtoday, which is often the same as `merchantApiName`



- **User ID and Session ID:** see the DRMtoday [configuration document](#) (when the License Delivery Authorization type is `Test_dummy` )
- **Asset ID:** the `assetId` configured in step 3.2
- **Variant ID:** the `variantId` configured in step 3.2