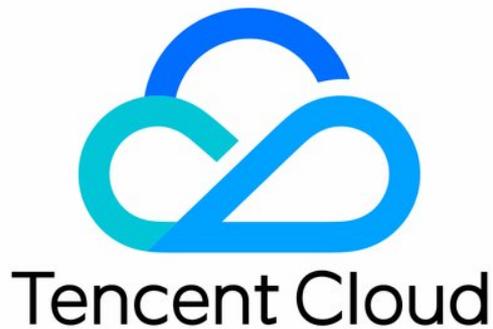


StreamLive

Best Practices

Product Documentation



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Best Practices

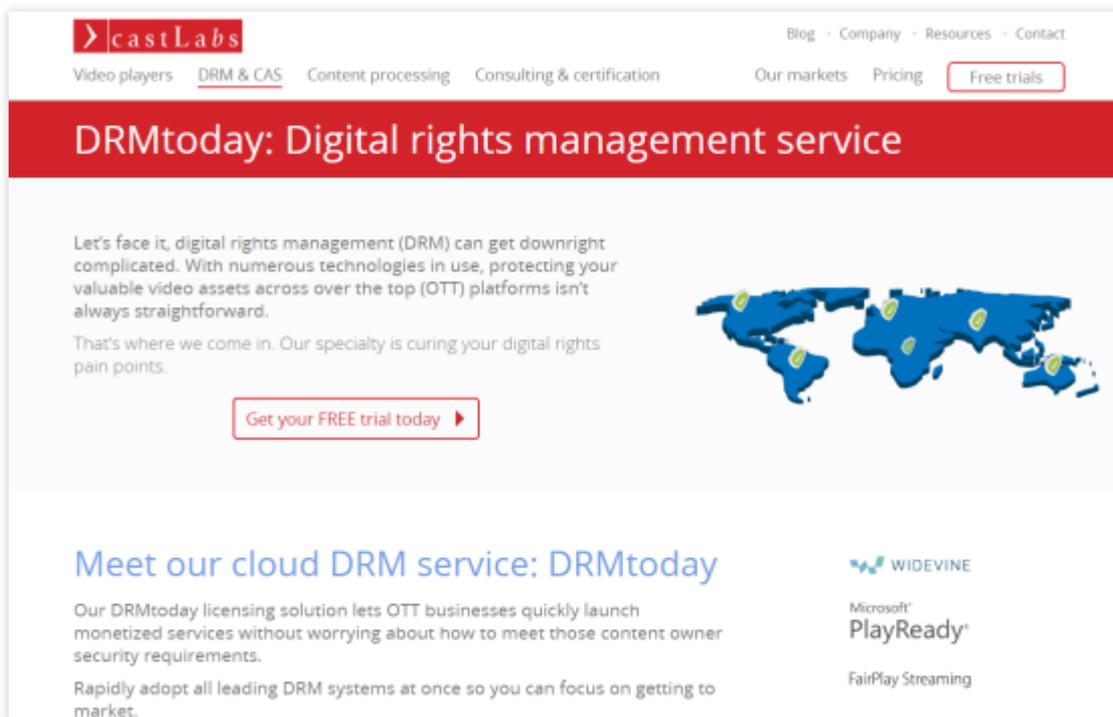
Channel DRM Configuration via DRMtoday

Last updated : 2022-02-24 14:21:33

Step 1. Apply for an account

1. Sign up for a DRMtoday account.

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



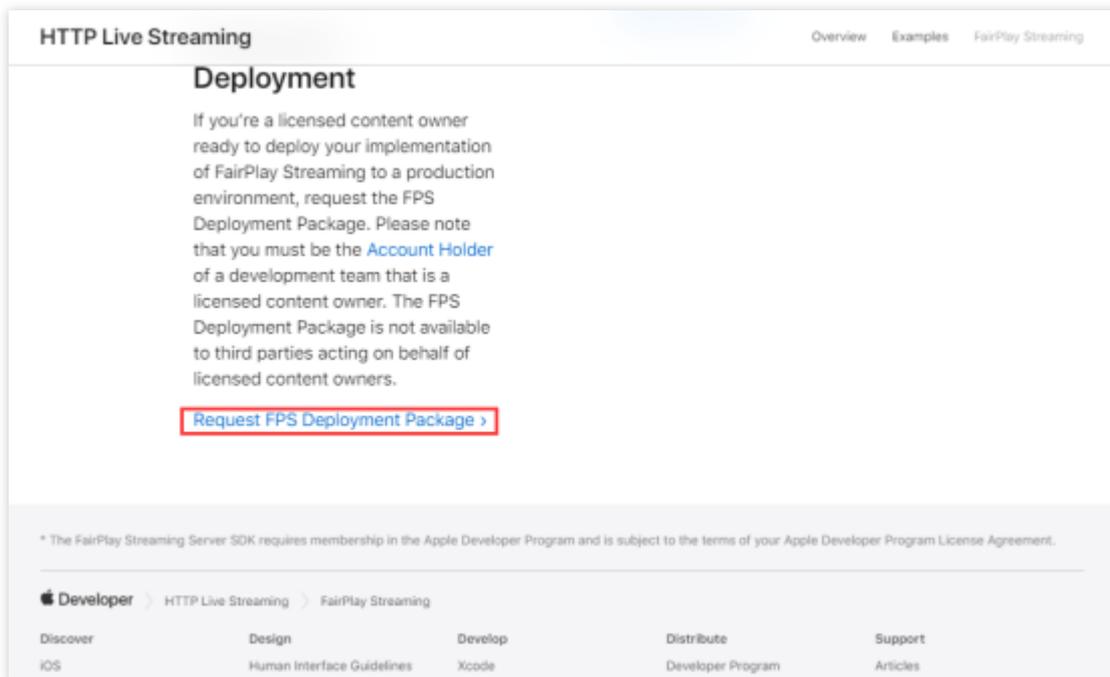
The screenshot shows the homepage of the DRMtoday website. At the top left is the 'castLabs' logo. The navigation menu includes 'Video players', 'DRM & CAS', 'Content processing', and 'Consulting & certification'. On the right, there are links for 'Blog', 'Company', 'Resources', and 'Contact', along with 'Our markets', 'Pricing', and a 'Free trials' button. A prominent red banner reads 'DRMtoday: Digital rights management service'. Below this, a text block explains that DRM is complicated and that DRMtoday specializes in curing digital rights pain points. A 'Get your FREE trial today' button is present. The bottom section features the heading 'Meet our cloud DRM service: DRMtoday' and describes the licensing solution. Logos for 'WIDEVINE', 'Microsoft PlayReady', and 'FairPlay Streaming' are displayed on the right.

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

2. Apply for a FairPlay certificate.

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

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



c. Get the `FPS_Deployment_Package.zip` file.

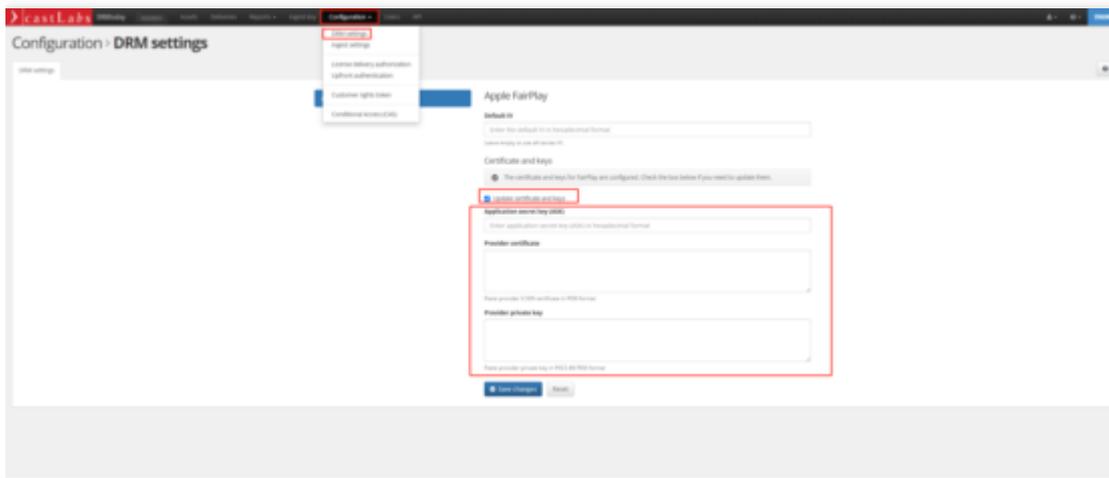
d. Decompress the file and create a local password-protected private key and CSR (certificate signing request) as described in the file.

e. Submit the CSR to Apple as described in the file, and an application secret key (ASK) will be returned. Store it properly.

f. Download the FairPlay certificate generated.

Step 2. Upload the FairPlay certificate to DRMtoday

Go to the DRMtoday dashboard website and choose **Configuration > DRM settings**.



The parameters are described as follows:

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

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

- **Application secret key (ASK):** enter the ASK obtained when applying for the FairPlay certificate (step 1) in hexadecimal format.
- **Provider certificate:** enter the FairPlay certificate downloaded when applying for the FairPlay certificate (step 1). 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 the 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](#).

a. CAS login: send an 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}'
```

The parameters are described as follows:

- **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](#).

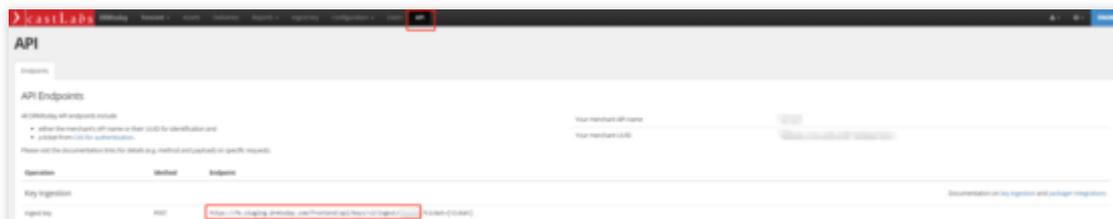
b. CAS ticket retrieval: send an HTTP POST request to the location in the header of the response of the CAS login request.

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}'
```

The parameters are described as follows:

- **service**: the endpoint corresponding to the ingest key on the **Dashboard > API** page.



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=="}]}]}'
```

The parameters are described as follows:

- **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 `3030303030303030303030303030303030` after being converted into the hexadecimal format.

Step 4. Configure the DRM key in StreamLive

See the DRM key configuration directions provided in [Configure output groups](#). Related parameters are described as follows:

- Enable **DRM**.
- For **Scheme**, select **Custom DRM Keys**.

After configuring the playback address by referring to the StreamLive User Guide (for example, you can [output the live streams to a StreamPackage channel](#)) and get the playback address from the StreamPackage endpoint (see [Console Guide](#)), you can run the playback test on the [DRMtoday playback page](#).

Player
Docs
Contact us



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

Demos
Stats
Logs
Configure

RESET
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

DRMtoday STAGING

Merchant

User ID

Session ID

Auth Token

Asset ID

Variant ID

The parameters are described as follows:

- **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:** enter the `assetId` configured during key configuration in step 3.
- **Variant ID:** enter the `variantId` configured during key configuration in step 3.

StreamLive Outputting to COS

Last updated : 2022-02-23 18:02:30

StreamLive allows you to output HLS files to COS for archiving, for which you need to create a bucket in COS first and grant StreamLive access to the bucket.

1. Activate the COS service and create a COS bucket.

Before outputting files to COS for archiving, you need to [activate COS](#). After activating COS, go to the [COS console](#), choose **Bucket List** on the left sidebar, and click **Create Bucket** to create a COS bucket in your region.

Create Bucket



Name

test1

-1257



Only support lowercase letters, numbers and "-". Up to 50 characters.

Region

Asia-Pacific

Singapore

Services within the same region can be accessed through private network

Access Permissions



Private Read/Write



Public Read/Private Write



Public Read/Write

Anonymous read operations can be performed on objects, while write operations require identity verification.

Note:

Public read access allows anonymous identities to access your resources, which may lead to a security risk. We recommend you choose private access to ensure the security of your data.

It is recommended to use [Hotlink Protection](#), effectively preventing unauthorized use of your traffic.

Default Alarm



An alarm notification will be issued when the offline traffic within 1 minute is detected to be greater than 5000MB.

Endpoint

test1-12573.cos.ap-singapore.myqcloud.com

Request endpoint

[Advanced Settings](#)

OK

Cancel

- Set the output type to **HLS_ARCHIVE**. Go back to the StreamLive console, and select **HLS_ARCHIVE** for **Output Group Type**.

Group 1

Basic Information

Output Group Name *

Output Group Type *

Destination Information

COS Destination A
When using it for the first time, please [click here](#) to authorize StreamLive to use the COS service. If the authorization is completed, please [click here](#) to refresh status.

COS Destination B

3. Authorize StreamLive to access the COS bucket. As you have not granted StreamLive access to your COS bucket, the COS destination fields are grayed out and cannot be entered. Click **click here** as instructed, and an authorization dialog box will pop up. Click **Authorize Now** to enter the authorization page, and then click **Grant** to complete the authorization.

Current features require your authorization



To use the **StreamLive** feature, please allow **StreamLive** to access some of your resources. They will access those authorized resources through the service roles to achieve the current feature. Please click "Authorize Now", to grant the access to related service APIs to **StreamLive**.

Authorize Now

Cancel

)

← Role Management

Service Authorization

After you agree to grant permissions to StreamLive, a preset role will be created and relevant permissions will be granted to StreamLive

Role Name MDL_QCSRole

Role Type Service Role

Description Current role is a StreamLive service role, which will access your other cloud service resources within the permissions of the associated policies.

Authorized Policies Preset policy QcloudAccessForMDLRoleInLiveStreamArchive

Grant Cancel

After completing the authorization, go back to the StreamLive console and click **Authorization completed**. The COS destination fields are now editable.

Confirm authorization complete



Have you completed the authorization of service role for the current feature?

Authorization completed

Authorization not completed

Group 1

Basic Information

Output Group Name * Please enter the output group name

Output Group Type * HLS_ARCHIVE

Destination Information

COS Destination A ? Please enter the destination url

COS Destination B ? Please enter the destination url

4. Enter the COS URL for archiving based on the COS bucket created, which is in the format of `http://.cos..myqcloud.com/path`.
5. Complete other channel configuration described in [StreamLive Channel Management](#) and save and submit the configuration.

StreamLive Outputting to StreamPackage

Last updated : 2022-02-23 18:02:30

You can use StreamLive together with StreamPackage and output HLS/DASH live streams directly to StreamPackage under the same account. This allows you to build your own origin server for video distribution and playback.

Activating StreamPackage

Before outputting to StreamPackage, you need to [activate the StreamPackage service](#) and create a StreamPackage channel.

Creating a StreamPackage channel

Click **Create Channel** in the top-left corner to create a channel. Enter a channel name. For **Input Protocol**, select the same protocol as the output type. For example, if the output type is **HLS_StreamPackage**, select **HLS**.

Note :

StreamLive and StreamPackage must be in the same region.

Create Channel ✕

Name *

Input Protocol *

HLS Setting

Max Segment Duration (sec) ⓘ *

Max Playlist Duration (sec) ⓘ *

Creating an endpoint

After creating the channel, you will enter its details page, where you can create an endpoint and select whether to enable IP blocklist/allowlist or authentication.

Create Endpoint ✕

Name ✓

Type

IP Restriction

IP Allowlist IP Blocklist

Please add one or more IPs (separated by semicolons) to endpoint allowlist, such as "192.168.0.1/24" or "192.168.0.1/24;192.168.0.2/24".

AuthKey

Please enter the AuthKey.

Getting the endpoint address and channel ID

The URL of the endpoint created is the playback/origin server address.

Information Input **Endpoints** CDN

<input type="checkbox"/> Name ↕	Endpoint Protocol	Url	Authentication	Operation
<input type="checkbox"/> test	HLS	<input type="text" value="[Redacted]"/>		Edit Delete

Total items: 1 10 / page 1 / 1 page

Note :

You will need the channel ID when configuring outputs in StreamLive.

Information	Input	Endpoints	CDN
Basic Information			
Name	test		
ID	6093 [blurred]		
Protocol	HLS		
Max Segment Duration (sec) ⓘ	15		
Max Playlist Duration (sec) ⓘ	600		

Selecting the output type

Go back to the StreamLive console, based on your needs and the type of the StreamPackage channel just created, select **HLS_STREAMPACKAGE** or **DASH_STREAMPACKAGE** for **Output Group Type**, and enter the channel ID in StreamPackage.

Group 1
Basic Information
Output Group Name * <input type="text" value="test"/>
Output Group Type * <input type="text" value="HLS_MEDIA_PACKAGE"/>
Destination Information
MediaPackage Channel ID ⓘ * <input type="text" value="6093 [blurred]"/>

Saving and submitting the configuration

Complete other channel configuration in [StreamLive Channel Management](#) and save and submit the configuration.

StreamLive Time Shifting

Last updated : 2022-02-23 18:02:30

Before using the time shifting feature of StreamLive, you need to activate Cloud Streaming Services (CSS) and StreamLive. In CSS, use the time shifting domain name as the playback domain name and add it according to the process of adding a domain name.

Activating the StreamLive time shifting feature

[Submit a ticket](#) to apply for activating the StreamLive time shifting feature, during which you need to provide your account APPID and time shifting domain name.

Configuring StreamLive time shifting

After activating the time shifting feature, you can enable the time shifting capability for StreamLive output groups via the console or API and bind the time shifting domain name.

Note :

Time shifting can be enabled only for HLS_ARCHIVE and DASH_ARCHIVE output groups.

1. Go to the StreamLive console and enter the **Channel Management** page.
2. Create a channel. Or select a channel for which time shifting is to be configured and click **Edit Channel**.
3. On the **Output Group Setting** page, set **Output Group Type** in the **Basic Information** area to **HLS_ARCHIVE** or **DASH_ARCHIVE**.
4. In the **TimeShift Information** area, toggle on the time shifting switch and enter the time shifting duration.

Note :

The time shifting duration must be between 300 seconds and 1,209,600 seconds.

Tencent Cloud Overview Products Cloud Object Storage Cloud Streaming Services Media Processing Service StreamLive StreamPackage StreamLink Ticket

StreamLive Edit Channel

Basic Information > Input Setting > 3 Output Group Setting

Group 1

Basic Information

Output Group Name: his1

Output Group Type: HLS_ARCHIVE

Destination Information

COS Destination A: Please enter the destination url

COS Destination B: Please enter the destination url

TimeShift Information

Switch:

PlayDomain: Please enter the playDomain

Startover Window: 300 (Between 300 and 1209600)

Segment Information

Segment Duration: 4000 (Between 1000 and 30000, only be a multiple of 1000)

Previous Done

显示菜单