

EZDRM Configuration

Anevia Encoder

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Version 1

Anevia Configuration

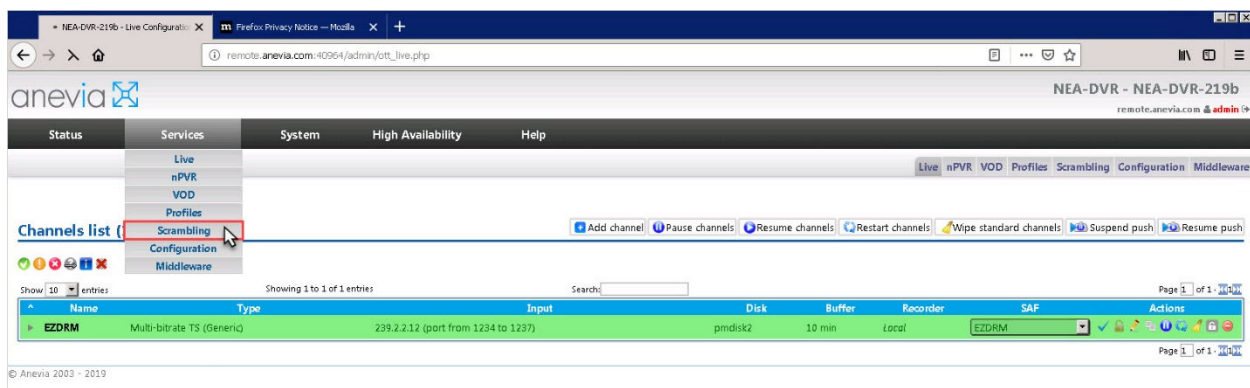
Overview

This document covers EZDRM configuration settings for the Anevia Encoder media pipeline for CPIX using Widevine and PlayReady over MPEG-DASH, and CPIX for Apple FairPlay Streaming.

Scrambling server profile settings

To set the EZDRM Scrambling configuration for content protection:

1. Once logged into your Anevia account, click the **Services** menu and select **Scrambling**.



2. Scroll to the **Scrambling Servers** section and create a new CPIX scrambling server by clicking the **+** icon or the **pencil icon** to edit an existing server.

Status	Services	System	High Availability	Help
Apple HLS PlayReady				
		No preset defined		
Apple HLS PlayReady BuyDRM				
		No preset defined		
Apple HLS PlayReady Viaccess				
		No preset defined		
Apple HLS Encryptonite				
		No preset defined		
MS Smooth Streaming Static fixed key				
		No preset defined		
MS Smooth Streaming BuyDRM				
		No preset defined		
MS Smooth Streaming Viaccess				
		No preset defined		
MS Smooth Streaming Verimatrix				
		No preset defined		
MPEG-DASH CENC Generic				
		No preset defined		
MPEG-DASH CENC WideVine				
		No preset defined		
MPEG-DASH CENC Verimatrix				
		No preset defined		
MPEG-DASH, Apple HLS, MS Smooth Streaming CPIX				
		No preset defined		
TS file Nagravision EMI				
		No preset defined		

Scrambling Servers

Here you can define scrambling servers to be used in scrambling configuration.
Warning: All scrambled outputs are restarted when scrambling servers are modified.

Type	Name	Actions
CPIX		
	EZDRM (default)	

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3. The scrambling server should be set to the following configuration:

Field Title	Description	EZDRM settings
Name	Scrambling server name	EZDRM
Default server	Flag to set server as default	True
Scrambling server URI	URI for key server (case sensitive)	https://cpix.ezdrm.com/copyProtectionData/
Timeout	Timeout settings	Not required



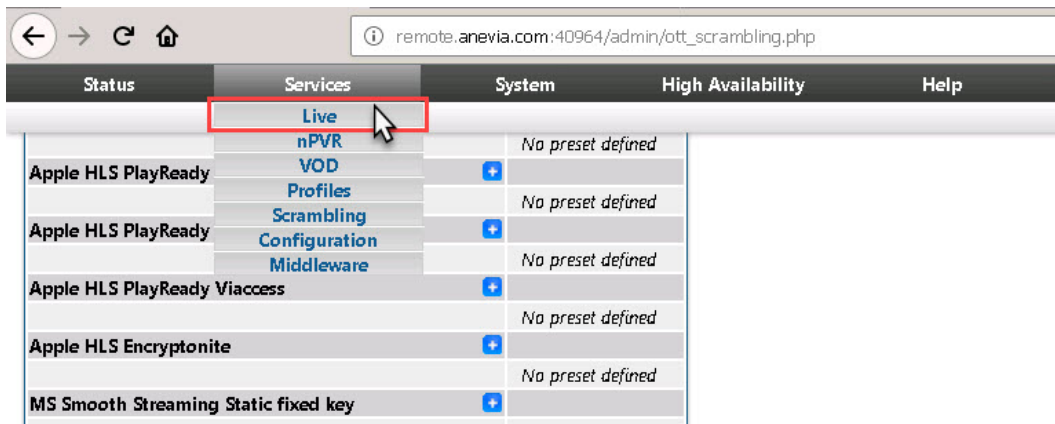
The screenshot shows a configuration window titled "CPDX: New scrambling server". It has a "Configuration" section with four fields: "Name" (EZDRM), "Default server" (checked), "Scrambling server URI" (https://cpix.ezdrm.com/copyProtectionData/), and "Timeout" (empty). To the right of the fields is an "Actions" column with a close button (X) and a checkmark button (✓). Each field has a help icon (?) to its right.

*Note: Scrambling server URI is case sensitive. Be sure that **"/copyProtectionData/"** is entered as shown above. Also be sure that the EZDRM server is set as default.*

Live channel scrambling settings

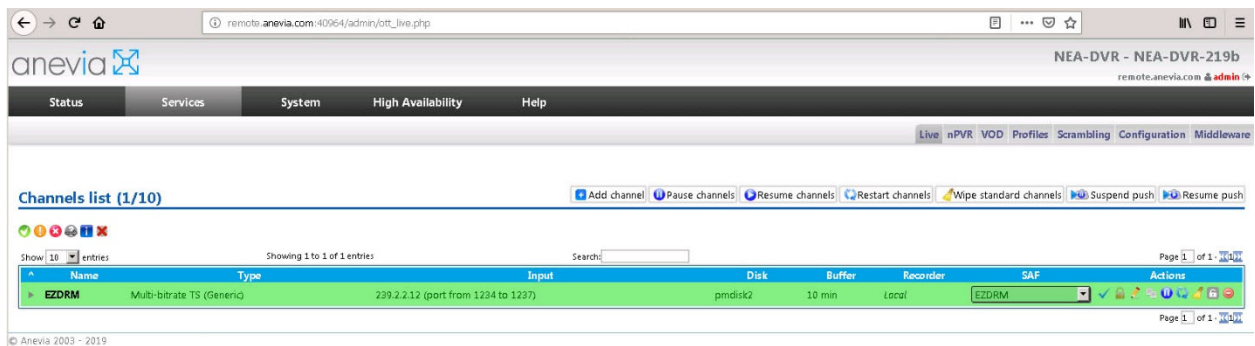
To edit the Live channel settings for EZDRM encrypted content streaming:

1. From the **Services** menu select **Live**.

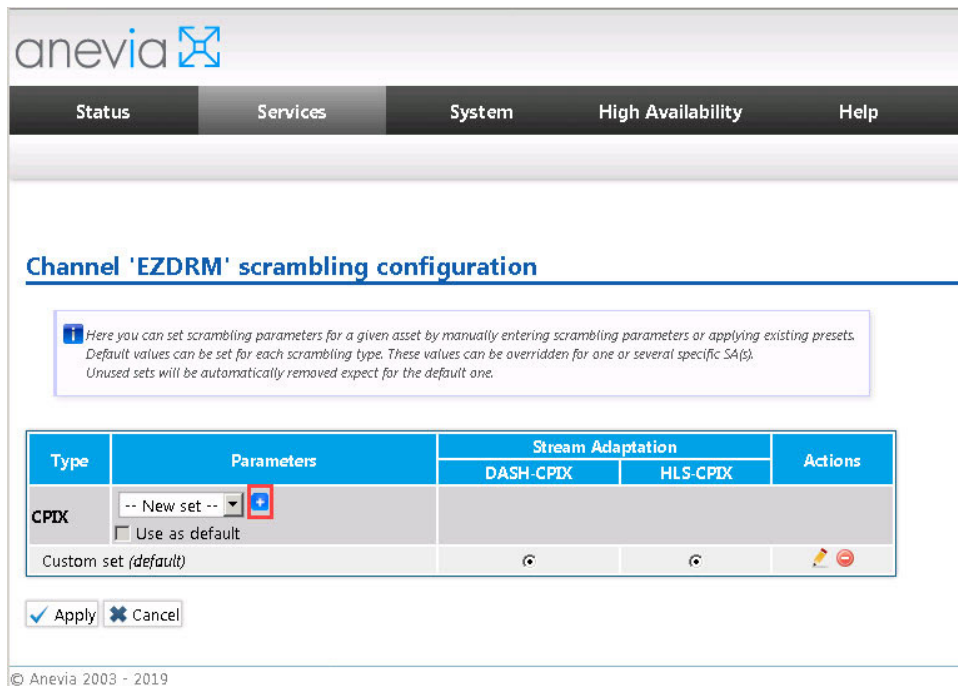


2. Edit your pre-existing channel scrambling configuration by clicking the  on the Actions channel menu.

3.



- Click the **+** icon to add new set of Parameters.



anevia

Status Services System High Availability Help

Channel 'EZDRM' scrambling configuration

Here you can set scrambling parameters for a given asset by manually entering scrambling parameters or applying existing presets. Default values can be set for each scrambling type. These values can be overridden for one or several specific SA(s). Unused sets will be automatically removed expect for the default one.

Type	Parameters	Stream Adaptation		Actions
		DASH-CPDX	HLS-CPDX	
CPDX	-- New set --  ☐ Use as default			
Custom set (default)		☐	☐	 

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- The Scrambling ID is made up of the following:

```
<<Stream ID>>&u=<<username>>&p=<<password>>
```

Parameter	Description
Stream ID	The channel name or output for the channel; your unique Stream ID value
u	EZDRM username
p	EZDRM password

Example Scrambling ID:

ezdrm-test-02052019&u=ezdrm@anevia.com&p=password

Channel 'EZDRM' scrambling configuration

i Here you can set scrambling parameters for a given asset by manually entering scrambling parameters or applying existing presets. Default values can be set for each scrambling type. These values can be overridden for one or several specific SA(s). Unused sets will be automatically removed except for the default one.

Type	Parameters	Stream Adaptation		Actions
		DASH-CPDX	HLS-CPDX	
CPDX	-- New set -- 			
	☐ Use as default			
	Custom set (default)			 

MPEG-DASH, Apple HLS, MS Smooth Streaming CPDX: Edit set		Actions
Scrambling parameters		
ID	52019&u=eZDRM@anevia.com&p=password	  
Scrambling server	(default)	

 Apply  Cancel

- Enter your **ID** as shown above and set Scrambling server to **default**. Click the  **checkmark** to apply changes.

Type	Parameters	Stream Adaptation		Actions
		DASH-CPDX	HLS-CPDX	
CPDX	-- New set -- 			
	☐ Use as default			
	Custom set (default)			 

MPEG-DASH, Apple HLS, MS Smooth Streaming CPDX: Edit set		Actions
Scrambling parameters		
ID	2052019&u=eZDRM@anevia.com&p=password	  
Scrambling server	(default)	
	(default)	
	EZDRM	

 Apply  Cancel

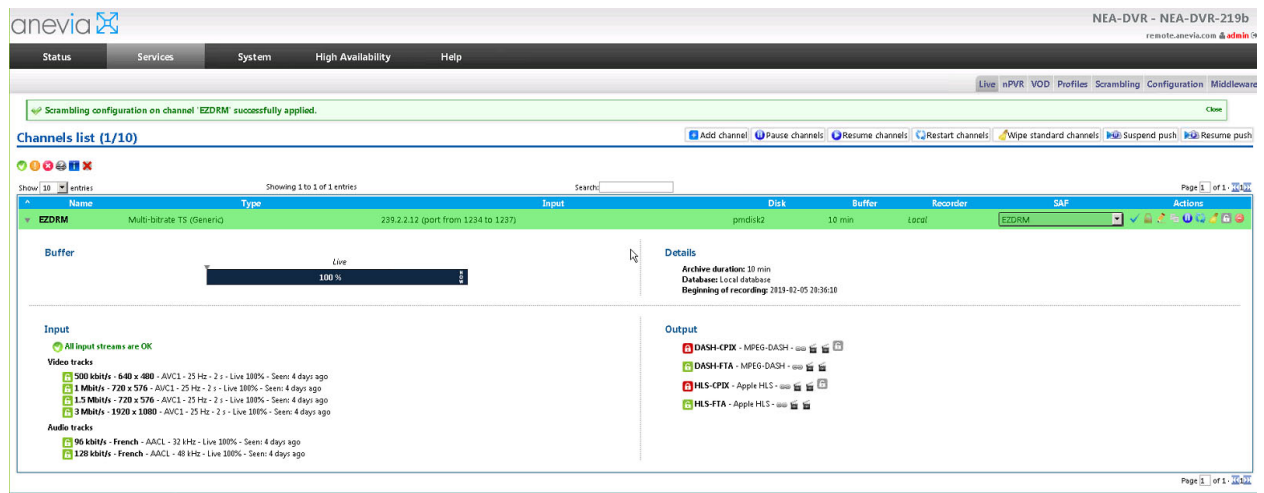
6. Click the **Apply** button to save changes.

Channel 'EZDRM' scrambling configuration

Here you can set scrambling parameters for a given asset by manually entering scrambling parameters or applying existing presets. Default values can be set for each scrambling type. These values can be overridden for one or several specific SA(s). Unused sets will be automatically removed except for the default one.

Type	Parameters	Stream Adaptation		Actions
		DASH-CPDX	HLS-CPDX	
CPDX	-- New set -- 			
	☐ Use as default			
Custom set (default)				 

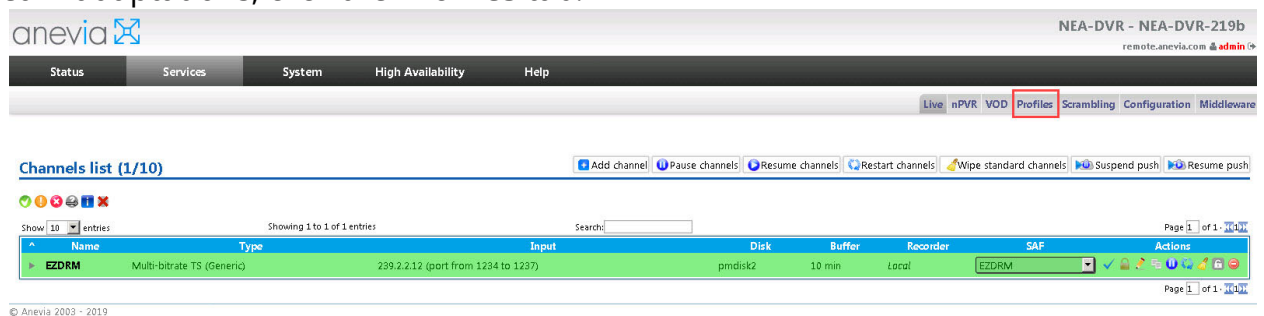
☒ **Apply** ☐ **Cancel**



The screenshot shows the Anevia NEA-DVR interface. At the top, there's a navigation bar with 'Status', 'Services', 'System', 'High Availability', and 'Help'. Below it, a breadcrumb trail shows 'Live' > 'nVDR' > 'VOD' > 'Profiles' > 'Scrambling' > 'Configuration' > 'Middleware'. A green message box states: 'Scrambling configuration on channel 'EZDRM' successfully applied.' Below this, the 'Channels list (1/10)' is shown with a table containing one entry: 'EZDRM' (Multi-bitrate TS (Generic)). The table has columns for Name, Type, Input, Disk, Buffer, Recorder, and SAF. The 'EZDRM' entry is highlighted. To the right of the table, there's a 'Details' panel showing 'Archive duration: 10 min', 'Database: Local database', and 'Beginning of recording: 2013-02-05 20:36:10'. Below the table, there's an 'Input' section showing 'All input streams are OK' and a list of video and audio tracks. The 'Output' section shows a list of stream adaptations: 'DASH-CPDX - MPEG-DASH', 'DASH-FTA - MPEG-DASH', 'HLS-CPDX - Apple HLS', and 'HLS-FTA - Apple HLS'.

Stream Adaptations – MPEG-DASH

The stream output type for Widevine and PlayReady is **MPEG-DASH**. To modify stream adaptations, click the **Profiles** tab.



The screenshot shows the Anevia NEA-DVR interface with the 'Profiles' tab selected. The navigation bar at the top is the same. The breadcrumb trail now shows 'Live' > 'nVDR' > 'VOD' > 'Profiles'. Below the breadcrumb trail, there's a 'Channels list (1/10)' with the same 'EZDRM' entry. The 'Details' panel on the right is empty. The 'Input' section shows 'All input streams are OK' and a list of video and audio tracks. The 'Output' section is empty. At the bottom left, there's a copyright notice: '© Anevia 2003 - 2019'.

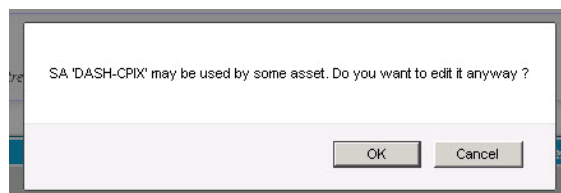
For **DASH-CPIX** click the **pencil icon** to edit settings.

Stream Adaptations

Here you have an overview of all available profiles. These profiles are shared between live, VOD and nPVR.
A Stream Adaptation Family (SAF) contains one or several Stream Adaptations (SA).
Two input types are available: HLS and Transcap format. A Transcap format input is compatible with Smooth Streaming input, multi-tribute input (for live), MP4 and PFF files (for VOD).

Name	Input	Output	Video	Audio	Subtitles	Scrambling	Publish/Push	Actions
EZDRM	Transcap format					Add a Stream Adaptation: No Stream Adaptation available		
DASH-CPDX		MPEG-DASH	All videos	First one	First one		Publish	
DASH-FTA		MPEG-DASH	All videos	First one	First one		Publish	
HLS-CPDX		Apple HLS	All videos	First one	First one		Publish	
HLS-FTA		Apple HLS	All videos	First one	First one		Publish	
New profiles								
New Stream Adaptation Family								
New Stream Adaptation								

Click **OK** to edit.



Under **Output**, be sure the **MPEG-DASH** output is selected.

Stream Adaptations

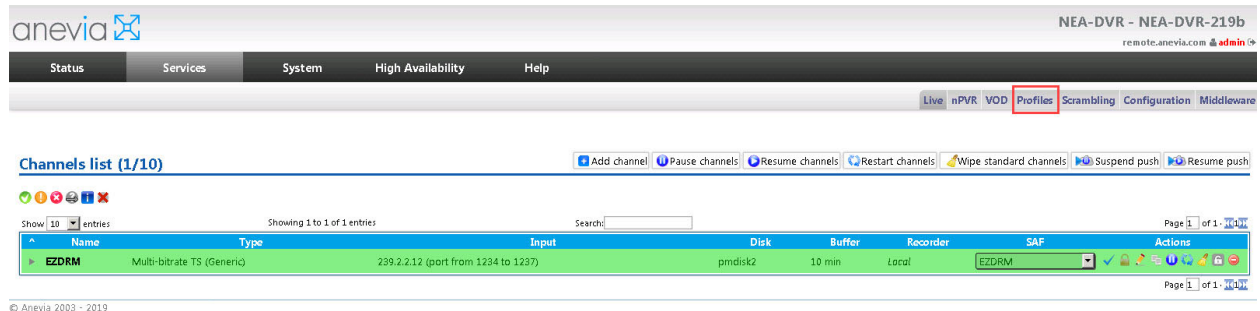
Here you have an overview of all available profiles. These profiles are shared between live, VOD and nPVR.
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Two input types are available: HLS and Transcap format. A Transcap format input is compatible with Smooth Streaming input, multi-tribute input (for live), MP4 and PFF files (for VOD).

Name	Input	Output	Video	Audio	Subtitles	Scrambling	Publish/Push	Actions
EZDRM	Transcap format					Add a Stream Adaptation:	No Stream Adaptation available	
DASH-CPDX		MPEG-DASH	All videos	First one	First one		Publish	
DASH-FTA		MPEG-DASH	All videos	First one	First one		Publish	
HLS-CPDX		Apple HLS	All videos	First one	First one		Publish	
HLS-FTA		Apple HLS	All videos	First one	First one		Publish	
New profiles								
New Stream Adaptation Family								
New Stream Adaptation								
Name	Input	Output	Video	Audio	Subtitles	Scrambling	Publish/Push	Actions
DASH-CPDX	Transcap format: Scrambled input: ☐	MPEG-DASH Apple HLS MS Smooth Streaming MPEG-DASH Adobe HDS TS file BaseURL: Use static timescale: Manifest minimal TTL during recording: Advanced settings ☐ 30 s None Time\$ dash/ ☒	Bitrate filtering: Min Max Actions	First one All languages None By language Advanced settings	First one All languages None By language Advanced settings	CPDX Local publishing Push configuration		

Under **Scrambling**, be sure the **CPIX** scrambling server is selected. Click the  to save changes.

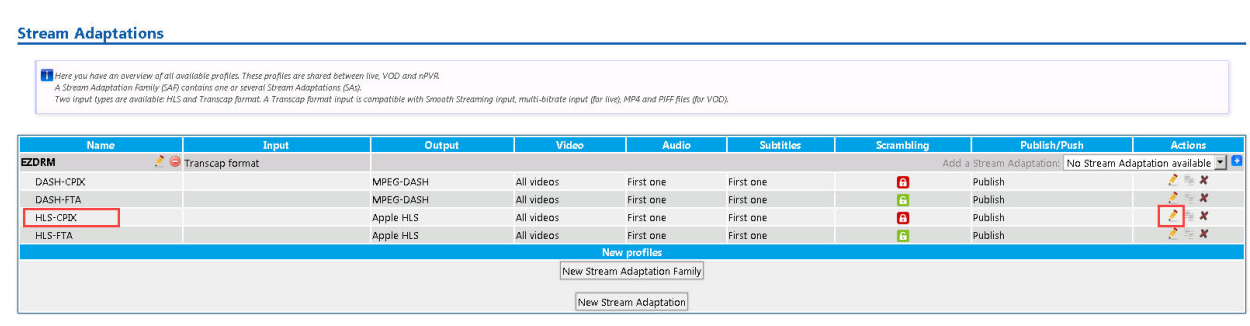
Stream Adaptations – Apple HLS

The stream output type Apple FairPlay streaming is **Apple HLS**. To modify stream adaptations, click the **Profiles** tab.



The screenshot shows the Anevia NEA-DVR-219b interface. The top navigation bar includes Status, Services, System, High Availability, and Help. Below this, a secondary bar contains Live, nPVR, VOD, Profiles (highlighted with a red box), Scrambling, Configuration, and Middleware. The main content area displays the 'Channels list (1/10)' with a table of channels. The first channel is 'EZDRM' with a 'Multi-bitrate TS (Generic)' type. The 'Profiles' tab is selected, and the 'EZDRM' channel is highlighted in green. The bottom of the interface shows the copyright '© Anevia 2003 - 2019'.

For **Apple HLS** click the **pencil icon** to edit settings.

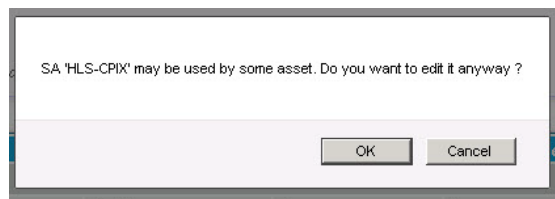


The screenshot shows the 'Stream Adaptations' section. It includes a warning message: 'Here you have an overview of all available profiles. These profiles are shared between live, VOD and nPVR. A Stream Adaptation Family (SAF) contains one or several Stream Adaptations (SA). Two input types are available: HLS and Transcap format. A Transcap format input is compatible with Smooth Streaming input, multi-bitrate input (for live), MP4 and PFF files (for VOD)'. Below this is a table of stream adaptations.

Name	Input	Output	Video	Audio	Subtitles	Scrambling	Publish/Push	Actions
EZDRM	Transcap format						Add a Stream Adaptation: No Stream Adaptation available	
DASH-CPDX		MPEG-DASH	All videos	First one	First one		Publish	
DASH-FTA		MPEG-DASH	All videos	First one	First one		Publish	
HLS-CPDX		Apple HLS	All videos	First one	First one		Publish	
HLS-FTA		Apple HLS	All videos	First one	First one		Publish	

Below the table, there are buttons for 'New profiles', 'New Stream Adaptation Family', and 'New Stream Adaptation'.

Click **OK** to edit.



Under **Output**, be sure **Apple-HLS** output is selected.

Here you have an overview of all available profiles. These profiles are shared between live, VOD and nPVR.

A Stream Adaptation Family (SAF) contains one or several Stream Adaptations (SA).

Two input types are available: HLS and Transcap format. A Transcap format input is compatible with Smooth Streaming input, multi-bitrate input (for live), MP4 and PIF files (for VOD).

Name	Input	Output	Video	Audio	Subtitles	Scrambling	Publish/Push	Actions
EZDRM	Transcap format					Add a Stream Adaptation: No Stream Adaptation available		
DASH-CPDX		MPEG-DASH	All videos	First one	First one		Publish	
DASH-FTA		MPEG-DASH	All videos	First one	First one		Publish	
HLS-CPDX		Apple HLS	All videos	First one	First one		Publish	
HLS-FTA		Apple HLS	All videos	First one	First one		Publish	

New profiles

New Stream Adaptation Family

New Stream Adaptation

Name	Input	Output	Video	Audio	Subtitles	Scrambling	Publish/Push	Actions
HLS-CPDX	Transcap format	Apple HLS MS Smooth Streaming MPEG-DASH Adobe HDS TS file Still picture: I-frame only playlists: Chunk timestamping: Live window length: Meta-data track: Meta-data repeat mode: DRM signaling in master playlist: HDCP protection: Ad-insertion Type: Manifest minimal TTL during recording:	Bitrate filtering: Starting bitrate:	First one All languages None By language	First one All languages None By language	CPDX Use sample-AES encryption	Local publishing Push configuration	✓ ✗

Under **Scrambling**, be sure the **CPDX** scrambling server is selected.

Note: Be sure that the "Use sample-AES encryption" checkbox is selected.

Here you have an overview of all available profiles. These profiles are shared between live, VOD and nPVR.

A Stream Adaptation Family (SAF) contains one or several Stream Adaptations (SA).

Two input types are available: HLS and Transcap format. A Transcap format input is compatible with Smooth Streaming input, multi-bitrate input (for live), MP4 and PIF files (for VOD).

Name	Input	Output	Video	Audio	Subtitles	Scrambling	Publish/Push	Actions
EZDRM	Transcap format					Add a Stream Adaptation: No Stream Adaptation available		
DASH-CPDX		MPEG-DASH	All videos	First one	First one		Publish	
DASH-FTA		MPEG-DASH	All videos	First one	First one		Publish	
HLS-CPDX		Apple HLS	All videos	First one	First one		Publish	
HLS-FTA		Apple HLS	All videos	First one	First one		Publish	

New profiles

New Stream Adaptation Family

New Stream Adaptation

Name	Input	Output	Video	Audio	Subtitles	Scrambling	Publish/Push	Actions
HLS-CPDX	Transcap format	Apple HLS Protocol version: Media segment format: Chunk duration: Audio only track: Still picture: I-frame only playlists: Chunk timestamping: Live window length: Meta-data track: Meta-data repeat mode: DRM signaling in master playlist: HDCP protection: Ad-insertion Type: Manifest minimal TTL during recording: Bitrate filtering: Starting bitrate:	First one All languages None By language	First one All languages None By language	CPDX Use sample-AES encryption	Local publishing Push configuration	✓ ✗	

Click the **checkmark** to save changes.