EZDRM CPIX Keys Guide

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Version 1.0

Introduction

The base CPIX.aspx URL for EZDRM is shown below:
https://cpix.ezdrm.com/KeyGenerator/cpix.aspx

Here is an example of the URL with parameters defined:
https://cpix.ezdrm.com/KeyGenerator/cpix.aspx?k=KeyID&u=username&p=password&c=resourcename

The following is the XML return for the test URL above (values returned are defined in the next sections):

```
This XML file does not appear to have any style information associated with it. The document tree is shown below.

▼<cpix:CPIX xmlns:cpix="urn:dashif:org:cpix" xmlns:ds="http://www.w3.org/2000/09/xmldsig#" xmlns:pskc="urn:ietf:params:xml:ns:keyprov:pskc" xmlns:xenc="http://www.w3.org/2001/04/xmlenc#"
  xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
  ▼<cpix:ContentKeyList>
    ▼<cpix:ContentKey kid="eb0b7a53-ab54-4804-826c-5989a99f6287" id="indy-test-004" explicitIV="K6RKVU7XVAH8ft9gJj486g==">
      ▼<cpix:Data>
        ▼<pskc:Secret>
            <pskc:PlainValue>NSS6UskV8Rq8uHYmbSDMcQ==</pskc:PlainValue>
          </pskc:Secret>
        </cpix:Data>
      </cpix:ContentKey>
    </cpix:ContentKeyList>
  ▼<cpix:DRMSystemList>
    ▼<cpix:DRMSystem kid="eb0b7a53-ab54-4804-826c-5989a99f6287" systemId="edef8ba9-79d6-4ace-a3c8-27dcd51d21ed">
      ▼<cpix:PSSH>
          AAAAdnBzc2gAAAAA7e+LqXnWSs6jyCfc1R0h7QAAAFYIARIQ6wt6U6tUSASCbFmJqZ9ihxoIbW92aWRvbmUiMnsia2lkIjoiNnd0NlU2dFVTQVNDYkZtSnFaOWlodz09IiwidHJhY2tzIjpbIlNEIl19KgJTRA==
        </cpix:PSSH>
      <cpix:ContentProtectionData/>
      </cpix:DRMSystem>
    ▼<cpix:DRMSystem kid="eb0b7a53-ab54-4804-826c-5989a99f6287" systemId="9a04f079-9840-4286-ab92-e65be0885f95">
      ▼<cpix:PSSH>
          AAACcHBzc2gAAAAAmgTweZhAQoarkuZb4IhflQAAAlBQAgAAAQABAEYCPABXAFIATQBIAEUAQQBEAEUAUgAgAHgAbQBsAG4AcwA9ACIAaAB0AHQAcAA6AC8ALwBzAGMAaABlAG0AYQBzAC4AbQBpAGMAcgBvAHMAbwBmAHQAQAAL gBjAG8AbQBpAGAAcgAvwAAANw
        </cpix:PSSH>
      ▼<cpix:ContentProtectionData>
          PG1zcHI6cHJvPlVBSUFBQUVBQVFCR0Fqd0FWd0JTQUUwQVNBQkZBRUVBUkFIZ0FrQUFBAUFHZ0FkQUUwQUdFQWNBQUFBAHdBcHBBQUAANw3QXVBBRzBBBYVFCakFJSUFFid0J6QUc4QVpnnQjBBQzhBBRzBBYjBWFCakFISUFFid0J6QUc8AJFQU
        </cpix:ContentProtectionData>
      </cpix:DRMSystem>
    ▼<cpix:DRMSystem kid="eb0b7a53-ab54-4804-826c-5989a99f6287" systemId="94ce86fb-07ff-4f43-adb8-93d2fa968ca2">
      ▼<cpix:URIExtXKey>
          c2tkOi8vZnBzLmV6ZHJtLmNvbS87NDNkNDA5YjctNTVkMy00ZmU3LWIzZTEtMDg2Yzl1ODgyYmZi
        </cpix:URIExtXKey>
      </cpix:DRMSystem>
    </cpix:DRMSystemList>
  </cpix:CPIX>
```

CPIX Parameters

The CPIX parameters are as follows using the sample URL below:

https://cpix.ezdrm.com/KeyGenerator/cpix.aspx?**k=**ebXXXXXX-abXX-4XX4-8X6c-XXXXaXXfXXXX&**u=**username&**p=**password&**c=**resourcename&**m=**1

Parameter	Description
k=	Key ID value (client generated) in GUID format
u=	Username
p=	Password
c=	Content Resource ID (such as a stream name or media asset name)
"m" value not provided	Default (returns all available keys)
m=0	Default (returns all available keys)
m=1	MPEG-DASH (PlayReady & Widevine)
m=2	HLS (FairPlay)

Widevine/PlayReady MPEG-DASH (m=1)

The sample URL for MPEG-DASH for Widevine and PlayReady is as follows:
https://cpix.ezdrm.com/KeyGenerator/cpix.aspx?k=ebXXXXXX-abXX-4XX4-8X6c-XXXXaXXfXXXX&u=username&p=password&c=resourcename&m=1

Key Value Definitions

Here are the descriptions of the key values returned by EZDRM:

cpix:ContentKeyList
> **kid** – Key ID in GUID format
> **pskc:Secret** – the Secret Content Encryption Key in Base 64 generated by EZDRM and returned as a plain value

DRM System List
> **kid** – Key ID in GUID format
> **systemId** – Widevine System ID
> **cpix:PSSH** – Widevine PSSH value
> **kid** – Key ID in GUID format
> **systemId** – PlayReady System ID
> **cpix:PSSH** – PSSH Value
> **ContentProtectionData** – the MS Pro Header

XML Return

Apple FairPlay DRM for HLS (m=2)

The sample URL for HLS for Apple FairPlay is as follows:
https://cpix.ezdrm.com/KeyGenerator/cpix.aspx?k=ebXXXXX-abXX-4XX4-86c-XXXXaXXfXXXX&u=username&p=password&c=resourcename&m=2

Key Value Definitions

Here are the descriptions of the key values returned by EZDRM:

cpix:ContentKeyList
  kid – Key ID in GUID format
  explicitIV – Apple FairPlay Explicit IV value
  Secret – the Secret Content Encryption Key in Base 64 generated by EZDRM
  and returned as a plain value
DRM System List
  kid – Key ID in GUID format
  systemId – Apple FairPlay System value
  URIExtXKey – the Apple FairPlay URI Ext Key value

XML Return

This XML file does not appear to have any style information associated with it. The document tree is shown below.

```
▼<cpix:CPIX xmlns:cpix="urn:dashif:org:cpix" xmlns:ds="http://www.w3.org/2000/09/xmldsig#" xmlns:pskc="urn:ietf:params:xml:ns:keyprov:pskc" xmlns:xenc="http://www.w3.org/2001/04/xmlenc#"
  xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
  ▼<cpix:ContentKeyList>
    ▼<cpix:ContentKey kid="eb0b7a53-ab54-4804-826c-5989a99f6287" id="indy-test-004" explicitIV="E2QSwB/pBLB/NFhLPpy8lA==">
      ▼<cpix:Data>
        ▼<pskc:Secret>
            <pskc:PlainValue>NSS6UskV8Rq8uHYmbSDMcQ==</pskc:PlainValue>
          </pskc:Secret>
        </cpix:Data>
      </cpix:ContentKey>
    </cpix:ContentKeyList>
  ▼<cpix:DRMSystemList>
    ▼<cpix:DRMSystem kid="eb0b7a53-ab54-4804-826c-5989a99f6287" systemId="94ce86fb-07ff-4f43-adb8-93d2fa968ca2">
      ▼<cpix:URIExtXKey>
          c2tkOi8vZnBzLmV6ZHJtLmNvbS87HTUxZGI2NGYtNThmMy00MWE5LTk5MzUtY2JhN&Y5ODk2NWRj
        </cpix:URIExtXKey>
      </cpix:DRMSystem>
    </cpix:DRMSystemList>
  </cpix:CPIX>
```

Default CPIX.aspx (m=0 // no m value)

When no "m" value is provided, the default XML file is sent with all available key values.

Key Value Definitions

Here are the descriptions of the key values returned by EZDRM:

cpix:ContentKeyList
    kid – Key ID in GUID format
    explicitIV – Apple FairPlay Explicit IV value
    pskc:Secret – the Secret Content Encryption Key in Base 64 generated by EZDRM and returned as a plain value
DRM System List
    kid – Key ID in GUID format
    systemId – Widevine System ID
    cpix:PSSH – Widevine PSSH value
    kid – Key ID in GUID format
    systemId – PlayReady System ID
    cpix:PSSH – PSSH Value
    ContentProtectionData – the MS Pro Header
    kid – Key ID in GUID format
    systemId – Apple FairPlay System value
    URIExtXKey – the Apple FairPlay URI Ext Key value

Below is an example of the default XML return:

This XML file does not appear to have any style information associated with it. The document tree is shown below.

```
▼<cpix:CPIX xmlns:cpix="urn:dashif:org:cpix" xmlns:ds="http://www.w3.org/2000/09/xmldsig#" xmlns:pskc="urn:ietf:params:xml:ns:keyprov:pskc" xmlns:xenc="http://www.w3.org/2001/04/xmlenc#"
 xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
  ▼<cpix:ContentKeyList>
    ▼<cpix:ContentKey kid="eb0b7a53-ab54-4804-826c-5989a99f6287" id="indy-test-004" explicitIV="K6RKVU7XVAH8ft9gJj486g==">
      ▼<cpix:Data>
        ▼<pskc:Secret>
            <pskc:PlainValue>NSS6UskV8Rq8uHYmbSDMcQ==</pskc:PlainValue>
        </pskc:Secret>
      </cpix:Data>
    </cpix:ContentKey>
  </cpix:ContentKeyList>
  ▼<cpix:DRMSystemList>
    ▼<cpix:DRMSystem kid="eb0b7a53-ab54-4804-826c-5989a99f6287" systemId="edef8ba9-79d6-4ace-a3c8-27dcd51d21ed">
      ▼<cpix:PSSH>
          AAAAdnBzc2gAAAAA7e+LqXnWSs6jyCfc1R0h7QAAAFYIARIQ6wt6U6tUSASCbFmJqZ9ihxoIbW92aWRvbmUiMnsia2lkIjoiNnd0NlU2dFVTQVNDYKZtSnFaOWlodz09IiwidHJhY2tJjbIlNEIl19KgJTRA==
      </cpix:PSSH>
      <cpix:ContentProtectionData/>
    </cpix:DRMSystem>
    ▼<cpix:DRMSystem kid="eb0b7a53-ab54-4804-826c-5989a99f6287" systemId="9a04f079-9840-4286-ab92-e65be0885f95">
      ▼<cpix:PSSH>
          AAACcHBzc2gAAAAAmgTweZhAQoarkuZb4IhflQAAAlBQAgAAAQABAEYCPABXAFIATQBIAEUAQQBEAEUAUgAgAHgAQBsAG4AcwA9ACIAaAB0AHQAcAA6AC8ALwBzAGMAABlAG0AYQQBzAC4AbQBpAGMAcgBvAHIAbwBmAHQAQALgBjAG8AbQAvAEQAUgBNAC8AMjAwAANw
      </cpix:PSSH>
      ▼<cpix:ContentProtectionData>
          PGIzcHI6cHJvPlVBSUFFBQUVBQVFCR0Fqd0FWd0JTQUUwQVNBQkZBRUVBRFVBVWdAaAHgAQBzAG4AcwA9ACIAaAB0AHQAcAA6AC8ALwBzAGMAABlAG0AYQQBzAC4AbQBpAGMAcgBvAHIAbwBmAHQAQALgBjAG8AbQAvAEQAUgBNAC8AMjAwAANwWVB... FMdOJFQU
      </cpix:ContentProtectionData>
    </cpix:DRMSystem>
    ▼<cpix:DRMSystem kid="eb0b7a53-ab54-4804-826c-5989a99f6287" systemId="94ce86fb-07ff-4f43-adb8-93d2fa968ca2">
      ▼<cpix:URIExtXKey>
          c2tkOi8vZnBzLmV6ZHJtLmNvbS587NDhkNDA5YjctNTVkMy00ZmU3LWIzZTEtMDg2Yzll0DgyYmZi
      </cpix:URIExtXKey>
    </cpix:DRMSystem>
  </cpix:DRMSystemList>
</cpix:CPIX>
```

Additional Information

For additional questions and comments please contact: sales@ezdrm.com