API Dokumentation v5

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Getting started

Loadings

Loading via npm

Prerequisites

- 1. The installation via npm requires webpack, browserify or a similar framework for your code to be interpreted by the browser. In React, Angular, Vue or similar technologies webpack often is included by default.
- 2. Access to the npm-Registry (https://npm-registry.netrtl.com/).

How to use the correct registry

If you already have access to the npm-Registry, please keep in mind to store the correct Registry in your npm. You can check your npm-Registry by calling npm get registry in a shell. This call should return the registry url (https://npm-registry.netrtl.com/). If not, you can set the correct registry by calling npm set registry https://npm-registry.netrtl.com in a shell.

Installation

Please make sure, that the project you want to install the player in already uses npm. If not you can initialize npm in your project by calling npm init -y.

Install the latest version of player with the following command: npm install @cbc/videoplayer.

If you want to install a special version add @x.x.x at the end of that command. For example npm install @cbc/videoplayer@5.0.1 installs the CBCVideoplayer in version 5.0.1. Whereas npm install @cbc/videoplayer@5.1 installs the latest version of the CBCVideoplayer in version 5.1.x.

Please make sure that the package.json file should contain a new entry of the CBCVideoplayer with the specified version. A package-lock.json file should exist now as well. This file is important to make sure, that f.e. colleagues are able to install exactly the same versions of all packages you installed. The CBCVideoplayer included. For this reason the package.json and package-lock.json should both be added to your version control system.

The CBCVideoplayer is now available in your JavaScript Code. You can either import it via import CBCVideoplayer from '@cbc/videoplayer' or const CBCVideoplayer = require('@cbc/videoplayer').

TL;DR

npm install @cbc/videoplayer

Loading via CDN

To load the CBCVideoplayer via CDN simply add the following <script> to your <head>:

```
<script src="https://bilder-a.akamaihd.net/lib/cbc/videoplayer/5/dist/videoplayer-bundle.js"></script>
```

The 5 may be replaced by any available version.

For example the following <script> loads the exact version 5.0.1:

```
<script src="https://bilder-a.akamaihd.net/lib/cbc/videoplayer/5.0.1/dist/videoplayer-bundle.js"></script>
```

Or the latest version of 5.1.x:

```
<script src="https://bilder-a.akamaihd.net/lib/cbc/videoplayer/5.1/dist/videoplayer-bundle.js"></script>
```

Polyfills

Please keep in mind that the videoplayer-bundle.js includes polyfills for unsupported browser features. If your application already loads polyfills by itself make sure to load the CBCVideoplayer bundle without polyfills included, to make sure that there are no conflicts:

```
<script src="https://bilder-a.akamaihd.net/lib/cbc/videoplayer/5/dist/videoplayer.js"></script>
```

Activation

Before using the CBCVideoplayer it is important to notice that the player contains a whitelist of URLs that are allowed to use that player. Please make sure that your test and production environments are listed in that whitelist.

A mirror of that whitelist can be found here:

Player URLs whitelist

If you need an activation feel free to reach out to the player squad, especially to Rogge, Fabian.

Interface

To integrate the player in your site it has to be initialized first. Use the create method on the CBCVideoplayer object to do that:

```
CBCVideoplayer.create(videoElementId: string, config: CbcVideoplayerConfig, videoElementId?: string)
```

Configuration

The configuration schema is the following:

```
label: string, // Description text
                 sublabel: string, // Description text
                 isPremium: boolean, // If this quality should only be choosable for premium users
                 checked: boolean // If this quality is checked
            }]
        },
        controls: { // URLs for customized controls (see Custom Controls)
            jsUrl: string,
            cssUrl: string
        addableIDsWhitelist: [string] // A whitelist of HTML-IDs that should not be cleared inside the player
container
    tracking: { // Information used for tracking
        offer: string, // The tracking offer
        videoService: string, // Name of the wrapping page
        device: string, // A device descriptor
        privMode: boolean, // If the user has tracking enabled
        display: string, // Device type of the user
        heartbeat: { // Tracking options for heartbeat
            options: {
                beatInterval: integer, // Interval of the heartbeats clickEvent: string // The user's click event
        nielsen: {
            vcId: string, // Channel-ID
            clientId: string, // Mediengruppe RTL Deutschland's ID
            sfCode: string, // Use "eu-cert" for testing and "eu" in production
            prod: string, // Use "vc" to activate Beacon Measurement, "" to deactivate apld: string // Assigned to channels
        googleAnalytics: {
            googleAnalyticsId: string, // Google Analytics ID
            gaLocation: string, // Individual parameter for the googleAnalytics measurement
            gaReferrer: string,// Individual parameter for the googleAnalytics measurement
            gaTitle: string // Individual parameter for the googleAnalytics measurement
        infOnline: {
            st: string // Individual parameter for the infOnline measurement
            st: string // Individual parameter for the infOnline measurement
        chartbeat: any, // Tracking configuration for chartbeat
        nurago: any, // Tracking configuration for nurago
        tagCommander: any, // Tracking configuration for tagCommander
        {\tt facebook:} \  \, {\tt any,} \  \, {\tt //} \  \, {\tt Tracking configuration for facebook}
        googleAdWords: any, // Tracking configuration for googleAdWords
        googleFloodLight: any // Tracking configuration for googleFloodLight
    features: { // General activation\deactivation of features
        concurrentStream: { // Omit to deactivate streamcheck
            startUrl: string, // URL, to start streamcheck
            heartbeatUrl: string, // URL, to update streamcheck
            stopUrl: string // URL, to stop streamcheck
        bitmovinAnalytics: {
            frontendVersion: string, // The client's frontend version
            backendVersion: string, // The client's backend version customOffer: string // Individual offer, besides tracking.offer
        logging: { // Settings for browser's logging
  level: 'TRACE' | 'DEBUG' | 'INFO' | 'WARN' | 'ERROR' // Default: 'INFO'
        streamingErrors: { // Internal error measurements
            deviceId: string // The users device type
        homad: { // Configuration for anti ad block
            enabled: boolean, // If anti ad block is enabled
            clientConfigUrl: {\tt string} // URL to the anti ad block configuration file
    user: { // Information about the user
        statusCode: integer, // A magic number for the user's state, evaluating to: 'free', 'premium', etc.
        id: string, // Unique user identifier
        personalisationId: string, // The google personalisation ID
        accountPersonalisationId: string, // The accoubt personalisation ID
        hdPlayout: boolean, // If the user should receive a HD playout
        isPremium: boolean, // If the user is premium user
        ovAllowed: boolean, // If the user is allowed to choose the original version
        loggedIn: boolean, // If the user is logged in
        hashedEMail: string, // The hashed user mail
        smartDataId: string, // Tracking parameter
```

```
activeExperimentNames: string, // Tracking parameter
  variationNames: string, // Tracking parameter
  sessionKey: string, // An ID that is unique for every login with the same account
  jwt: string // A JWT used for further authentication
},
isLivestream: boolean, // If the displayed source is a livestream
  unsupportedPlayerConfig: any, // An object, passed through to the Bitmovin Player
  unsupportedAdvertisingConfig: any // An object, passed through to the Advertising Module
```

Methods

Further methods on the CBCVideoplayer object

There are 2 more methods on the CBCVideoplayer object besides the create function. In the following all 3 methods will be explained in detail:

create

Method signature: (videoElementId: string, cbcVideoplayerConfigInput: CbcVideoplayerConfig) => Player

This method creates a new player instance. To do this 2 arguments get passed: 1. A videoElementId: HTML ID where the player should be rendered in 2. A cbcVideoplayerConfigInput: Details mentioned above

onEvent

```
Method signature: onEvent (videoElementId: string, handler: Eventhandler)
Eventhandler signature: (anv: Event) => void
```

The onEvent function takes a videoElementId and a handler. The videoElementId equals the player container's ID, that was used to create the player. If you have more than one player instance on your page, this method may be used to bind an Eventhandler to a special player instance.

onEventUnfiltered

```
Method signature: onEventUnfiltered (handler: Eventhandler)
Eventhandler signature: (any: Event) => void
```

This function binds an Eventhandler on all existing player instances. If there is only one player instance on the site onEvent and onEventUnfiltered do the same

Instance methods

The following methods describe the methods on the Player type that is created by a create method call.

The player type in general:

```
interface Player{
   async loadVideo (loadVideoConfig: CbcLoadVideoConfig): void
   registerPlugin (plugin: Eventhandler): void
   pause (issuer?: string): void
   async play (issuer?: string): void
   async destroy (): void
   getLogFiles (): []Log
                            // Log: {time: Date, logLevel:string, messages: []string}
   getCurrentTime (): number
    isSupportedPlatform (): boolean
    isSupportedDRMPlatform (): boolean
   toggleCssClass (className: string): void
   isPlaying (): boolean
   seek (): void
   getDuration (): number
   isAd (): boolean
    enterFullscreen (): void
   exitFullscreen (): void
    isFullscreen (): boolean
   setMaxVideoQuality (videoQuality: number): void
   updateMetadata(metadata: Meta): void
   updateContentInfo(contentInfo: ContentInfo): void
   disallowFullscreen (): void
   allowFullscreen (): void
   disabledActions (message?: string, actions: DisabledActions[] = [], pause: boolean = false): void
```

async loadVideo

 $\begin{tabular}{ll} \textbf{Method signature:} async loadVideo (loadVideoConfig: CbcLoadVideoConfig): void \\ \end{tabular}$

This method loads a video into the player. This call is highly customizable why it is handled in detail in LoadVideo call's configuration.

Please keep in mind that this method is an async function. That means that the execution runs asynchronous. To wait for the resolved function result see Async-Await documentation on Mozilla Developer Network

registerPlugin

```
Method signature: registerPlugin (plugin: Eventhandler): void
Eventhandler signature: (any: Event) => void
```

Registers a player plugin. The eventhandler will be called on every occurring event. In some way this method is equal to a call of the CBCVideoplayer. onEvent method with the matching videoElementId.

pause

```
Method signature: pause (issuer?: string): void
```

Pauses the player. The issuer may be passed optional to display who (user or api) paused the player.

async play

```
Method signature: async play (issuer?: string): void
```

Starts the player. The issuer may be passed optional to display who (user or api) started the player.

Please keep in mind that this method is an async function. That means that the execution runs asynchronous. To wait for the resolved function result see Async-Await documentation on Mozilla Developer Network

async destroy

Method signature: async destroy (): void

Stops the player and removed it from the DOM. After this function resolved the player instance is not usable anymore.

Please keep in mind that this method is an async function. That means that the execution runs asynchronous. To wait for the resolved function result see Async-Await documentation on Mozilla Developer Network

getLogFiles

```
Method signature: getLogFiles (): []Log
Log: { time: Date, logLevel:string, messages: []string}
```

Returns a list of log entries. This log entries will be logged independently from the configured LogLevel. This way the player may be configured that it will not log to the browser console, but to a retrievable log file for support cases.

getCurrentTime

Method signature: getCurrentTime (): number

Returns the current playback time in seconds.

isSupportedPlatform

 $\begin{tabular}{ll} Method signature: \verb"isSupportedPlatform" (): boolean \\ \end{tabular}$

Returns if the videoplayer is compatible to the combination of device and browser.

isSupportedDRMPlatform

Method signature: isSupportedDRMPlatform (): boolean

Returns if the playback of DRM content is compatible to the combination of device and browser.

toggleCssClass

Method signature: toggleCssClass (className: string): void

Adds or removes a HTML class on the player container.

isPlaying

Method signature: isPlaying (): boolean

Returns if the player is currently playing.

getDuration

Method signature: getDuration (): number

Returns the total duration (in seconds) of the currently loaded video.

isAd

Method signature: isAd (): boolean

Returns if the player currently plays advertising.

enterFullscreen

Method signature: enterFullscreen (): void

Starts the fullscreen mode programmatically.

exitFullscreen

Method signature: exitFullscreen (): void

Exits the fullscreen mode programmatically.

isFullscreen

 $\begin{tabular}{ll} Method signature: is Fullscreen (): boolean \\ \end{tabular}$

Returns if the player is currently in fullscreen mode.

setMaxVideoQuality

Method signature: setMaxVideoQuality (videoQuality: number): void

Sets the user's selected max video quality.

updateMetadata

Method signature: updateMetadata(metadata: Meta): void

Update Metadata for tracking.

updateContentInfo

Method signature: updateContentInfo(contentInfo: ContentInfo): void

Update ContentInfo for PlayerUI.

disallowFullscreen

Method signature: disallowFullscreen(): void

Blocks the function to enter fullscreen mode and ends the fullscreen If the user is currently using it.

allowFullscreen

Method signature: allowFullscreen(): void

Allowed to enter fullscreen

disabledActions

Method signature: disabledActions (message?: string, actions: DisabledActions[] = [], pause: boolean = false): void

Disabled player interaction and can shows an overlay with a message

Actions that can be deactivated (DisabledActions): playpause, seek, language, settings

LoadVideo call's configuration

 $The \ method \ signature \ for \ \texttt{loadVideo} \ \ \texttt{loadVideo} \ \ \texttt{(loadVideoConfig: CbcLoadVideoConfig): void} \\$

The following schema shows the configuration possibilities for the loadVideoConfig:

```
type Constraint = {
  enabled: boolean, // If the Constraint is enabled
  errorText: string // Error text to be shown if the constraint matches
type VideoTime = { // General type for passing time
  inSeconds: number
type CbcFairplay = { // Uses `user.jwt` (optional), see CbcVideoplayerConfig
  certificateUrl: string
  url: string
type CbcPlayready = {
 url: string // Uses GET-Parameter 'token' in URL or `user.jwt`(optional), see CbcVideoplayerConfig
type CbcWidevine = { // Uses `user.jwt` (optional), see CbcVideoplayerConfig
  url: string
type CbcLoadVideoConfig = {
    meta: { // Meta information for the video
        id: any, // Video ID
        category: string, // The video's category
length: VideoTime, // Video length
        title: string, // The video's title
        description: string, // The video's description text
        fsk: string, // FSK text. F.e. "ab 12
        supplier: string, // Supplier of the video content
        genre: string, // The video's genre
        format: string, // The format's name
        previewStart: string, // The preview's start. Format: YYYY-MM-DD hh:mm:ss
        startDate: string, // The video's publishing date. Format: YYYY-MM-DD hh:mm:ss
        createDate: string, // The video's creation date. Format: YYYY-MM-DD hh:mm:ss
        isPayedContent: boolean, // If the video is payed content
        isWebOnly: boolean, // If the video is only available in web
        refPlanningId: number, // individual tracking parameter
        agof: string, // individual tracking parameter
        {\tt comment:} \ {\tt string,} \ {\tt //} \ {\tt individual} \ {\tt tracking} \ {\tt parameter}
        ivw: string, // infOnline identification path of the video
        payStatusCode: number, // payStatus code of the video like 'free_justmissed' or 'pay_archive'
        startTypeCode: number, // startType code of the video like 'autoplay', 'replay' or 'userStart'
        recoStart: string // individual tracking parameter
    advertising: { // The ad-playback's general configuration
        privMode: boolean, // If the private mode is enabled
        playAds: {
            preroll: boolean, // If a preroll should be played
            midroll: boolean, // If a midroll should be played
            postroll: boolean // If a postroll should be played
            nonLinear: boolean // If a nonLinear should be played
        midrollOffsets: [] VideoTime, // If a midroll should be played pass the offsets where the midrolls should
play here
        limits: {
            preroll: VideoTime, // How long should a video be to play preroll ads, default is 29
            midroll: VideoTime, // How long should a video be to play midroll ads, default ist 479
            nonLinear: VideoTime, // How long should a video be to play non linear ads, default ist 479
            postroll: VideoTime, // How long should a video be to play postroll ads, default is 29
        specialAds: {
            companionAds: boolean, // If companion ads should be enabled
            vpaidAds: boolean // If vpaid ads should be enabled
        singlePreRoll: boolean, // If only one preroll should be played
        skippAbleAds: boolean, // If make all Ads skippAble
            prerollBumper: boolean, // If there should be a bumper before the preroll
            postrollBumper: boolean, // If there should be a bumper before the midroll
            stationBumper: boolean, // If there should be a bumper before the postroll
            bumperUrls: [] string, // A List of URLs the bumpers will be chosen randomly from
            closerUrls: [] string, // A List of URLs the openers will be chosen randomly from
            openerUrls: [] string // A List of URLs the bumpers will be chosen randomly from
            category: string, // video zone identification for the adserver
            contentPartner: string, // Individual adcall parameter
            fixParams: [] string, // key-value pairs to attach to the adcall
            tags: [] string, // key-value pairs with user targeting
            defaultTags: [] string, // default targeting as key-value pairs, if no user targeting detected
```

```
referrerUrl: string // domain name, default: 'protocoll://hostname'
        },
    },
    styling: {
        logo: { // settings for the corner logo
            aspectRatioOld: boolean, //default: false, set true if aspect ratio is 4:3
            url: string, // The URL for the corner logo. Supported formats can be seen here: https://developer.
mozilla.org/en-US/docs/Web/Media/Formats/Image_types
            position: 'topLeft' | 'topRight' | 'bottomCenter' | 'bottomRight', // Where the logo should be
            basewidth: number // The base with from where the image should be scaled to the fitting size
    },
    contentInfo: {
        productPlacement: boolean, // If an advice about product placement should be shown
        contest: boolean, // If an advice about ? should be shown
        dontCall: boolean, // If an advice 'do not call' should be shown
        fsk: string, // A text that should be shown as FSK note (f.e. 'ab 12')
        title: string, // The title that should be shown on the top left
        description: string, // The subtitle that should be shown on the top left
        format: string // The name of the format that should be shown on the top left
    behavior: {
        autoplay: boolean, // If autoplay is enabled
        muted: boolean, // If the player is muted
        smoothFadeIn: boolean, // Default 'true', enabled smooth video fadeIn and FadeOut at video start
        pauseInactivePlayer: boolean, // Default 'true', enables pausing and playing video when player was left
or entered
    },
    videoSource: {
        poster: string, // URL to the poster image that is shown before the content starts (recommended format: .
jpg)
            dashUrl: string, // URL to the dash manifest
            hlsUrl: string, // URL to the hls manifest
            progressiveUrl: string, // URL to the progressive manifest
            dashHdUrl: string, // URL to the dash HD manifest hlsHdUrl: string // URL to the hls HD manifest
            preferredTech: string 'hls' | 'dash' | 'progressive', // Generates the desired stream technology for
the player
        parts: { // May be omitted to disable the part player
          breakpoints: [] VideoTime // Breakpoints where the part player insert a chapter switch
        startTime: VideoTime, // A time where the video should start
        eshOffset: VideoTime, // An offset from the end of the video, when the ESH-Event should be fired
        breakpoints: {
            [name: string]: VideoTime // Breakpoints to be passed // Example: //SIN: { inSeconds: 100 } // The
intro starts after 100 seconds // EIN: { inSeconds: 130 } // The intro ends after 130 seconds
        },
            securityLevel: number, // required securety level, default is 3, 1 is the highest preferredTech: string 'PlayReady' | 'Widevine' | 'FairPlay', // Generates the desired drm technology
for the player
            headers: [] string, // Custom headers for license call widevine: CbcWidevine | Bitmovin.WidevineDRMConfig, // https://bitmovin.com/docs/player/api-reference
/web/web-sdk-api-reference-v8#/player/web/8/docs/interfaces/drm.widevinemodulardrmconfig.html
            playready: CbcPlayready | Bitmovin.PlayReadyDRMConfig, // https://bitmovin.com/docs/player/api-
reference/web/web-sdk-api-reference-v8#/player/web/8/docs/interfaces/drm.playreadydrmconfig.html
            fairplay: CbcFairplay | Bitmovin.FairPlayDRMConfig // https://bitmovin.com/docs/player/api-reference
/web/web-sdk-api-reference-v8#/player/web/8/docs/interfaces/drm.applefairplaydrmconfig.html
    },
    constraints: { // Constraints that should be enabled or disabled
        backgroundColor: string, // Set background color for error message
        concurrentStream: Constraint, // Whether the player should check for concurrent streams, if so the
errorText will be shown
       drmPlatformIssue: Constraint, // ErrorText shown if the DRM check fails on because the browser or device
does not support DRM
        drmServerIssue: Constraint, // ErrorText shown if the DRM check fails on the server
        adBlocker: Constraint, // Whether the player should check for ad blocks, if so the errorText will be shown
        \hbox{downscaling: $\tt Constraint, // scaling down the size of the video, required to increase user awareness when}
using adBlockers
        geoBlocking: Constraint, // Whether the player should check if the content is allowed to be played in the
playback country, if not the errorText will be shown
       platformIssue: Constraint, // Whether the player should check if the platform supports video playback, if
not the errorText will be shown
    }
}
```

Events

In the following you see a list of the most relevant events that will be passed to Eventhandlers: A complete list of all available events you can find in Gitlab:

CustomEvents

| Event | Description |
|-----------------------------|--|
| onPlayerLoaded | Fired after the player has been initialised |
| onPlayerReady | Fired when all sources have loaded additional ads and the player is ready to start playback |
| onVideoLoad | Fired when the content source request is started |
| onVideoLoaded | Fired when the content source was loaded |
| onSessionStart | Fired after first video load on this page |
| onSessionEnd | Fired after last video unload (after postroll). In the partplayer on Session End only is thrown after the last part or last postroll |
| onContentStart | Fired on each content start (except advertising) even in part player mode |
| onContentEnd | Fired on each content end (except advertising) even in part player mode |
| onRewind | Fired if the user rewinds |
| onFastForward | Fired if the user fast forwards |
| onEnterPlayer | Fired when the player enters the visible area |
| onLeavePlayer | Fired when the player leaves the visible area |
| onChapterSwitch | Fired when a new part is loaded (partplayer) |
| onConCurrentStreamDetect | |
| onDRMServerError | |
| onGeoBlockingError | |
| onContentTimeChanged | |
| onInfoShow | Fired when some kind of information is displayed for the user |
| onLoadNewContentSource | Fired when a new content source has been loaded into the (part) player |
| onESHOffset | Fired when the ESH offset is reached (see LoadVideo call's configuration) |
| onAdBlockerDetected | |
| onReplay | |
| onUpdateContentInfo | |
| onUpdateMetaData | |
| onDestroyed | |
| onDisabledFullscreenChanged | |
| onDisabledActions | |
| onAdFrameChanged | |

AdvertisingEvents

| Event | Description |
|-------------------|-----------------------------------|
| onAdSlotStarted | Fired when an ad slot started |
| onAdSlotComplete | Fired when an ad slot is finished |
| onAdClickThru | |
| onAdError | |
| onAdStopped | |
| onAdMuted | |
| onAdPaused | |
| onAdVideoComplete | |
| onAdVideoStart | |
| onAdPlaying | |
| onAdSkipped | |
| onAdSlotStopped | |
| onAdSlotStart | |
| onAdStarted | |
| onAdStart | |
| onAdUnmuted | |
| onAdVolumeChanged | |
| onGeneralError | |

ControlsEvent

| Event | Description |
|---------------------------|---|
| onSelectChapter | |
| onMaxVideoQualitySelected | |
| onBackButtonClicked | Fired when BackButton in UI was clicked |
| onRePlayButtonClicked | |
| onElementClicked | |

PlayerEvent

| Event | Description |
|-----------------------------------|-------------|
| onDestroy | |
| onReady | |
| onSeek | |
| onSeeked | |
| onVolumeChanged | |
| onVideoQualityChanged | |
| onVideoPlaybackQuality Changed | |
| onUnmuted | |

| onPlay | |
|--------------------|--|
| onPlaybackFinished | |
| onPlaying | |
| onSourceLoaded | |
| onSourceUnloaded | |
| onStallEnded | |
| onStallStarted | |
| onPaused | |
| onMuted | |
| onFullscreenEnter | |
| onFullscreenExit | |
| onError | |
| | |

Ad Errors

The following list shows all possible errors that can occur while playing an advertising:

| ErrorCode | Description | When |
|-----------|--|---------|
| 100 | XML parsing error. | Pre-Ad |
| 101 | VAST schema validation error. | Pre-Ad |
| 102 | VAST version of response not supported. | Pre-Ad |
| 200 | Trafficking error. The video player received an ad type that it was not expecting and/or cannot display. | Pre-Ad |
| 201 | Video player expecting different linearity. | Pre-Ad |
| 202 | Video player expecting different duration. | Pre-Ad |
| 203 | Video player expecting different size. | Pre-Ad |
| 300 | General wrapper error. | Pre-Ad |
| 301 | Timeout of VAST URI provided in wrapper element or of VAST URI provided in a subsequent wrapper element. (RI was either unavailable or reached a timeout as defined by the video player.) | Pre-Ad |
| 302 | Wrapper limit reached, as defined by the video player. Too many wrapper responses have been received with no inLine response. | Pre-Ad |
| 303 | No ads VAST response after one or more wrappers. This also includes the number of empty VAST responses from fallback. | Pre-Ad |
| 400 | General linear error. The video player is unable to display the linear ad. | Pre-Ad |
| 401 | File not found. Unable to find linear/mediaFile from URI. | Pre-Ad |
| 402 | Unable to download or timeout of MediaFile URI. | Pre-Ad |
| 403 | Could not find a media file that is supported by this video player, based on the attributes of the MediaFile element. | Post-Ad |
| 405 | Problem displaying a media file. Video player found a MediaFile with supported type but couldn't display it. MediaFile may include: unsupported codecs, different MIME type than MediaFile@type, unsupported delivery method, etc. | Post-Ad |
| 406 | A mezzanine file was required, but not provided. | Pre-Ad |
| 407 | The mezzanine file was downloaded for the first time, so the ad did not serve. | Pre-Ad |
| 408 | The ad returned in the VAST response was rejected. | Pre-Ad |
| 409 | The interactive creative defined in the InteractiveCreativeFile node was not executed. | Pre-Ad |
| 410 | The code referenced in the Verification node was not executed. | Pre-Ad |
| 500 | General NonLinearAds error. | Pre-Ad |

| 501 | Unable to display non-linear ad because creative dimensions do not align with creative display area (in other words, the | Pre-Ad |
|------|---|--------------------------|
| 500 | creative dimension was too large). | D A-I |
| 502 | Unable to fetch NonLinearAds/NonLinear resource. | Pre-Ad |
| 503 | Could not find NonLinear resource with supported type. | Pre-Ad |
| 600 | General CompanionAds error. | Pre-Ad |
| 601 | Unable to display companion because creative dimensions do not fit within the companion display area (in other words, space was not available). | Pre-Ad |
| 602 | Unable to display required companion. | Pre-Ad |
| 603 | Unable to fetch CompanionAds/Companion resource. | Pre-Ad |
| 604 | Could not find Companion resource with supported type. | Pre-Ad |
| 900 | VAST 2 error. | Pre-Ad |
| 901 | General VPAID error. | Post- Opportu nity |
| 1000 | HomadPenalty | Pre-Ad |

Custom Controls

As already mentioned in the *Configuration* section the controls can be customized by passing an url for the custom-control JavaScript (CbcVideoplayerConfig.page.controls.jsUrl) and an url for the custom-control CSS (CbcVideoplayerConfig.page.controls.cssUrl).

By default the bitmovin's base controls are used. The player comes with longform controls prepared.

As with the player itself the controls can be loaded via npm or CDN.

Custom Controls via NPM

The latest controls can be installed via ${\tt npm}\ {\tt i}\ @{\tt obc/videoplayer-controls-longform@1}.$

The JavaScript file can then be found under $node_modules/@cbc/videoplayer-controls-longform/dist/js/bitmovinplayer-ui.min.js.$ The CSS file under $node_modules/@cbc/videoplayer-controls-longform/dist/css-tvnow/bitmovinplayer-ui.min.css.$

Please make sure to expose those files via your server and pass that URL to the config as described above.

Custom Controls via CDN

As with the player the controls can also be found on a CDN.

The URL for the JavaScript file is: https://bilder-a.akamaihd.net/lib/cbc/videoplayer-controls-longform/1/dist/js/bitmovinplayer-ui.min.js.

 $And the \ URL for the \ CSS file is: https://bilder-a.akamaihd.net/lib/cbc/videoplayer-controls-longform/1/dist/css/bitmovinplayer-ui.min.css.$

Both URLs can now be passed to the configuration.

The config might look like this: