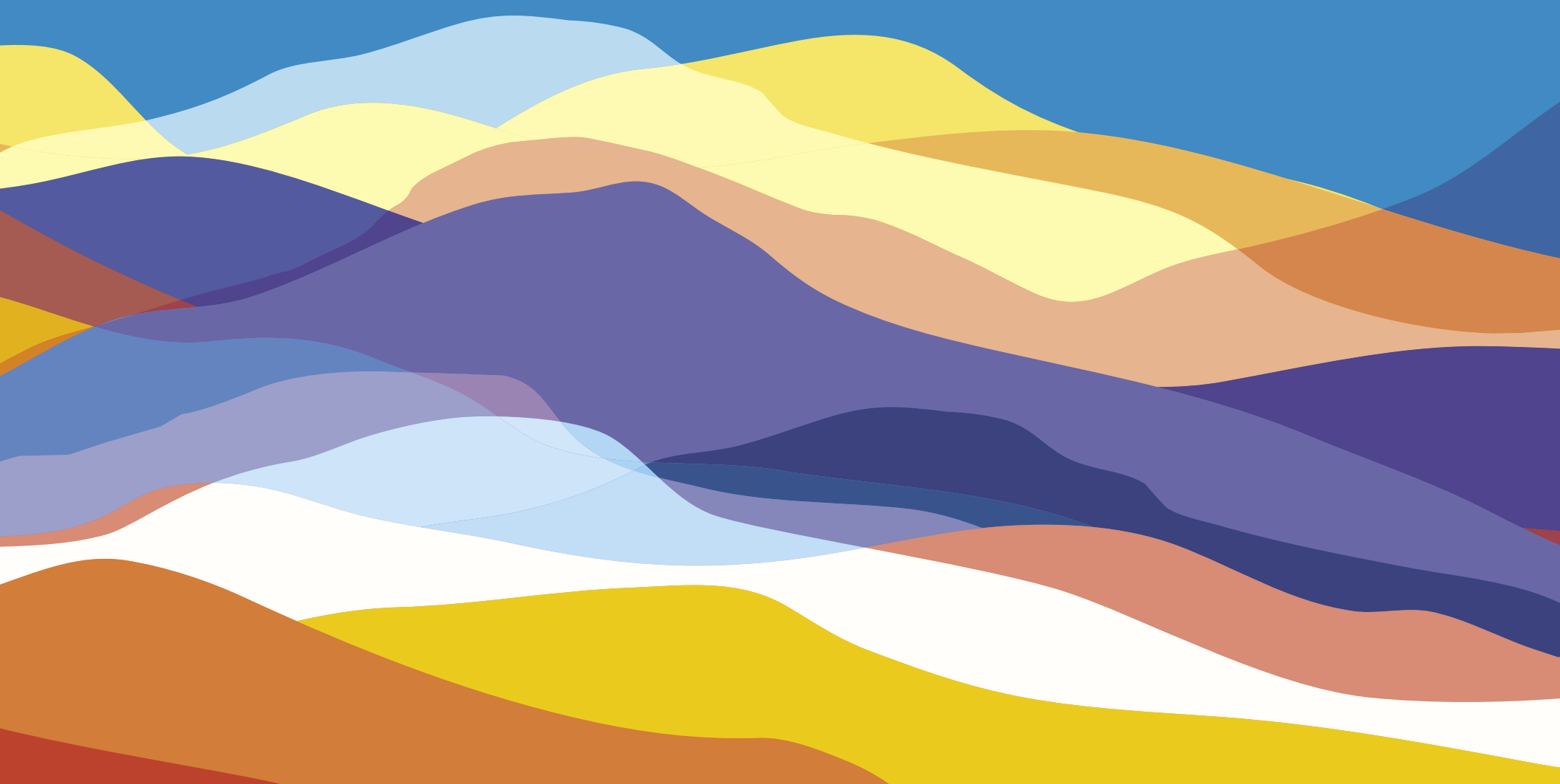Adobe Advertising Cloud

Ad Specs

Pre-Roll

Standard (VAST)

A video ad that plays before premium content on leading websites, mobile apps and connected tv inventory.

SUPPORTED SCREENS

Ads are delivered by default on Desktop, Mobile & Connected TV devices.

• Device Targeting available to adjust delivery

ADOBE SERVED

1. Video Asset (Required):

See below

• **Click-through URL (Required):**
  one single destination URL for video ads. URL must be secured (https://).

• **Companion Banner (Optional):**
  Image: JPG/JPEG, PNG, GIF
  Size: 300x250, 300x600, 300x60, 728x90

• **3rd party pixels (Optional):** We recommend using SSL-compliant pixels to maximize your access to available inventory. Major providers are supported.

2. High Definition Video (required)

Video Codec: MP4/H.264

Resolution:
• 1280x720 for 720p
• 1920x1080 for 1080p

Bitrate:
• 1500-2500 kbps for 720p
• 2500-3500 kbps for 1080p

H.264 Profile/Level:
• High profile, level 3.1 for 720p
• High profile, level 4.0 for 1080p

Video Frame Rate:
• 29.970 fps for NTSC countries, commonly referred to as 30 fps
• 25 fps for PAL countries
• 23.976 fps for film-look content, commonly referred to as 24 fps

Video Color Space: 4:2:0 YUV Chroma Subsampling
Video Interlacing: Progressive scanning, ie non-interlaced. No intra-field motion (blending frames) or interlacing.
Leaders (Slate): No leaders (slate) before or after ad content

Audio Codec: AAC-LC or HE-AACv1

Audio Bitrate:
• 128-192 kbps for AAC-LC
• 64-128 kbps for HE-AACv1

Audio Channel: 2 channel stereo mix
Audio Sample Rate: 44.1 kHz or 48 kHz as per source material

Audio Levels:
• 24 LKFS (+/- 2.0 dB) in the US as per ATSC A/85
• 23 LUFS (+/- 1.0) in the EU as per EBU R128

3. Mezzanine Video (Recommended; Required for Hulu and premium video supply)

Bit Rate: 50Mbps VBR or 15-30 CBR 5
Aspect Ratio: 16:9 (HD) or 4:3 (SD)
Note: 16:9 is preferred "letter-boxing" (black bars) should be avoided

Resolution:
• Aspect Ratio 16:9 = 1920x1080 or 1280x720
• Aspect Ratio 4:3 = 1440x1080

Color Space: 4:2:0 or 4:2:2 YUV

Frame Rate:
Depending on region, use one of the following frame rates:
• PAL (25 fps)
• 24p (23.98 fps)
• NTSC Video (29.97 fps)

Codec:
• MPEG2, H.264/AAC
• H.264 or Apple ProRes
• H.265 /HEVC

Format: .mov or .mp4
Scan type: Progressive

THIRD PARTY SERVED

Supported 3rd party vast tag providers include:
• DCM
• Innovid
• Celtra
• Sizmek

Interactive (VAST/VPAID)

An interactive video ad that plays before premium content on leading websites, mobile apps and connected tv inventory.

SUPPORTED SCREENS

Ads are delivered by default on Desktop & Mobile devices.

• Device Targeting available

ADOBE SERVED

We support VPAID 2 JS.
We do NOT support VPAID 2 Flash.

1. Video Asset (Required):

See below

• **Click-through URL (Required):**
  one single destination URL for video ads. URL must be secured (https://).

• **Companion Banner (Optional):**
  Image: JPG/JPEG, PNG, GIF
  Size: 300x250, 300x600, 300x60, 728x90

• **3rd party pixels (Optional):** We recommend using SSL-compliant pixels to maximize your access to available inventory. Major providers are supported.

2. High Definition Video (required)

Video Codec: MP4/H.264

Resolution:
• 1280x720 for 720p
• 1920x1080 for 1080p

Bitrate:
• 1500-2500 kbps for 720p
• 2500-3500 kbps for 1080p

H.264 Profile/Level:
• High profile, level 3.1 for 720p
• High profile, level 4.0 for 1080p

Video Frame Rate:
• 29.970 fps for NTSC countries, commonly referred to as 30 fps
• 25 fps for PAL countries
• 23.976 fps for film-look content, commonly referred to as 24 fps

Video Color Space: 4:2:0 YUV Chroma Subsampling
Video Interlacing: Progressive scanning, ie non-interlaced. No intra-field motion (blending frames) or interlacing.
Leaders (Slate): No leaders (slate) before or after ad content

THIRD PARTY SERVED

All VPAID ad units must adhere to the VPAID guidelines as defined by the IAB specification:

https://www.iab.com/wp-content/uploads/2015/06/VPAID_2_0_Final_04-10-2012.pdf

Supported 3rd party vast / vpaid tag providers include:
• DCM
• Innovid
• Celtra
• Sizmek

CAVEATS

Minimal mobile in-app VPAID JS inventory available for mobile and CTV

Pre-Roll (cont.)

Skippable (VAST)

A skippable video ad that plays before premium content on leading websites, mobile apps and connected tv inventory.

SUPPORTED SCREENS

Ads are delivered by default on Desktop & Mobile devices.
• Device Targeting available

ADOBE SERVED

1. Video Asset (Required):

See below

• **Click-through URL (Required):**
  one single destination URL for video ads. URL must be secured (https://).

• **Companion Banner (Optional):**
  Image: JPG/JPEG, PNG, GIF
  Size: 300x250, 300x600, 300x60, 728x90

• **3rd party pixels (Optional):** We recommend using SSL-compliant pixels to maximize your access to available inventory. Major providers are supported.

2. High Definition Video (required)

Video Codec: MP4/H.264

Resolution:
• 1280x720 for 720p
• 1920x1080 for 1080p

Bitrate:
• 1500-2500 kbps for 720p
• 2500-3500 kbps for 1080p

H.264 Profile/Level:
• High profile, level 3.1 for 720p
• High profile, level 4.0 for 1080p

Video Frame Rate:
• 29.970 fps for NTSC countries, commonly referred to as 30 fps
• 25 fps for PAL countries
• 23.976 fps for film-look content, commonly referred to as 24 fps

Video Color Space: 4:2:0 YUV Chroma Subsampling
Video Interlacing: Progressive scanning, ie non-interlaced. No intra-field motion (blending frames) or interlacing.
Leaders (Slate): No leaders (slate) before or after ad content

Audio Codec: AAC-LC or HE-AACv1

Audio Bitrate:
• 128-192 kbps for AAC-LC
• 64-128 kbps for HE-AACv1

Audio Channel: 2 channel stero mix
Audio Sample Rate: 44.1 kHz or 48 kHz as per source material

Audio Levels:
• 24 LKFS (+/- 2.0 dB) in the US as per ATSC A/85
• 23 LUFS (+/- 1.0) in the EU as per EBU R128

3. Mezzanine Video (Recommended; Required for Hulu and premium video supply)

Bit Rate: 50Mbps VBR or 15-30 CBR 5
Aspect Ratio: 16:9 (HD) or 4:3 (SD)
Note: 16:9 is preferred "letter-boxing" (black bars) should be avoided

Resolution:
• Aspect Ratio 16:9 = 1920x1080 or 1280x720
• Aspect Ratio 4:3 = 1440x1080

Color Space: 4:2:0 or 4:2:2 YUV

Frame Rate:
Depending on region, use one of the following frame rates:
• PAL (25 fps)
• 24p (23.98 fps)
• NTSC Video (29.97 fps)

Codec:
• MPEG2, H.264/AAC
• H.264 or Apple ProRes
• H.265 /HEVC

Format: .mov or .mp4
Scan type: Progressive
Leaders (slate): Video creative should be submitted without leaders (slate) before ad content.
Configuration: Picture to Picture (P2P), No slate, No countdown leader, No bars, No tone

Audio Format: AAC
Audio Bitrate: 192 kbps (AAC)
Audio Channel: 2 channel stereo mix L&R
Audio Sample Rate: 49kHz
Audio Levels: DB - 12 (average)

THIRD PARTY SERVED

Supported 3rd party vast tag providers include:

• DCM
• Innovid
• Celtra
• Sizmek

Native

Native In-Feed Video

Video ads that dynamically generate to match organic content within a publisher's feed. Option to run as a Click-to-Play video to drive viewer engagement, or as an AutoPlay video that plays only when asset is 50% in-view.

Native In-Feed Display

Image ads that dynamically generate to match organic content within a publisher's feed. Option to be still image or moving GIF (Cinemagraph).

SUPPORTED SCREENS

Ads are delivered by default on Desktop & Mobile devices.
• Device Targeting available to adjust delivery

ADOBE SERVED

Required asset for all Native In-Feed formats

Image Asset:
• **Resolution:** 1200x 627px (Recommended Minimum), 600x600px (Absolute Minimum)
• **File Type:** JPEG (Image ad or Video ad cover image), GIF (Cinemagraph)
• **File Size:** Less than 1 MB
  * *Image should be free of text*

Required asset for video Native In-Feed formats only

Video Asset:
• **Video Length:** 60s (Recommended), 120s (Maximum)
• **Aspect Ratio:** 16:9
• **File Type:** .MOV or.MP4
• **File Size:** 2-5MB (Recommended), 30MB (Maximum)

Advertiser Logo:
• **Resolution:** 300x300px (Recommended Minimum), 80x80 (Absolute Minimum)
• **File Type:** JPEG or PNG
  * *Image must have a 1x1 ratio*
  * *Depending on image to be overlayed over, choose between light or dark logo assets*

Text/Copy:
• **Headline:** 25 Characters (Recommended), 200 Characters (Maximum)
• **Caption:** 100 Character (Recommended), 200 characters (Maximum)
• **Sponsored By:** 30 Characters (Recommended), 200 characters (Maximum)
• **Call to Action:** 15 Characters (Maximum). *Only available on MoPub inventory*

  * *Final layout will be defined by the Publisher at runtime*
  * *Exceeding recommended character count may cause ads not to deliver on certain inventory providers or text to be truncated by the publisher or SSP.*

Landing Page URL:
• The clickthrough URL along with click trackers

THIRD PARTY SERVED

No Third-party ad serving. All ad serving done out of Adobe Advertising Cloud.

CAVEATS

Impression Tracking Pixels:
• 3rd party impression trackers need to be in 1x1 image URL format

Viewability JS Trackers:
• Supported for IAS only. Requires IAS 1x1's to be in JS.append format

Click Trackers:
• 3rd party click trackers need to have redirect to the landing page embedded to the URL (302 redirect)
• DMP Click Trackers with 200 response are not supported

Display

Standard (All Sizes)

Cost-efficient display units can greatly increase inventory scale and targeting options. This format is best used to drive performance and reach metrics. Select from a variety of format sizes across desktop or mobile devices.

Image or Rich Media elements render upon page load. Clicking ad unit sends viewer to destination landing site for further engagement.

Persistent brand messaging. Re-target audiences exposed to other branding initiatives.

SUPPORTED SCREENS

Ads are delivered by default on Desktop and Mobile.
• Device Targeting available to adjust delivery

ADOBE SERVED

File types supported:
• **Image:**
   • JPG/JPEG
   • PNG
   • GIF
• **HTML5:**
   • Image file types:
      • GIF
      • JPG/JPEG
      • PNG -SVG
• [Activation Guide](#)

1. Image Creatives (required)

Current ad sizes supported:
• 120x60
• 160x600
• 180x150
• 300x100
• 300x1050
• 300x250
• 300x600
• 480x60
• 640x480
• 88x31
• 728x90
• 970x250
• 970x90

Universal Display Ad Unit
COMING Q1 2019!

2. Click-Through URL (required)
One single destination URL for video ads.
URL must be secured (https://).

3. 3rd party pixels (optional)

THIRD PARTY SERVED

Supported 3rd party vast tag providers include:
• DCM
• Flashtalking
• Celtra
• Sizmek

Click-to-Play

Display ad where the user must click to engage. This is a guaranteed lean forward experience and provides one of the more engaging ways to reach an audience.

Click initiates countdown before video plays. Features on ad creatives include teasers, overlays and click-to-share buttons.

SUPPORTED SCREENS

Ads are delivered by default on Desktop and Mobile.
• Device Targeting available to adjust delivery

ADOBE SERVED

1. Video Asset (Required):

Max ad length: up to :30 seconds for initial auto-play. Once viewer engages, any length video (suggested up to 3:00 minutes)

Max file size:
• Custom: 2.2 MB max
• Playtime: 100MB max upload

Ad size limited to 300x250

• **Click-through URL (Required):** one single destination URL for video ads. URL must be secured (https://).
• **Companion Banner (Optional)**
• **3rd party pixels (Optional)**

2. Video Specs (required)
Resolution: At least 960x540px (16:9) or 960x720 (4:3)
Bitrate: 1-2MB
Frame Rate: 24-30
Audio Code: Auto Initiated, MP3 or AAC
Codec: H.264
Preferences: VAST 2.0

TRACKING CAPABILITIES

• Impression & Click Redirect (All pixels and tags must be SSL compliant (https). This does not apply for click through URLs and click trackers. Failure to provide secure tags and pixels may result in delivery issues.)
• 3rd Party tracking & pixels accepted
• Standard tag preferences

THIRD PARTY SERVED

Supported 3rd party vast / vpaid tag providers include:
• Celtra
• Sizmek
• Mixpo
• Flashtalking

Mobile

Standard Pre-Roll (VAST)

A video ad that plays before premium content on leading websites and mobile apps.

SUPPORTED SCREENS

Ads are delivered by default on Mobile Websites and Mobile Apps.
• OS and Browser Targeting available.

ADOBE SERVED

1. Video Asset (Required):

See below

• **Click-through URL (Required):**
  one single destination URL for video ads. URL must be secured (https://).

• **Companion Banner:** Not supported

• **3rd party pixels (Optional):** We recommend using SSL-compliant pixels to maximize your access to available inventory. Major providers are supported.

2. High Definition Video (required)

Video Codec: MP4/H.264

Resolution:
• 1280x720 for 720p
• 1920x1080 for 1080p

Bitrate:
• 1500-2500 kbps for 720p
• 2500-3500 kbps for 1080p

H.264 Profile/Level:
• High profile, level 3.1 for 720p
• High profile, level 4.0 for 1080p

Video Frame Rate:
• 29.970 fps for NTSC countries, commonly referred to as 30 fps
• 25 fps for PAL countries
• 23.976 fps for film-look content, commonly referred to as 24 fps

Video Color Space: 4:2:0 YUV Chroma Subsampling
Video Interlacing: Progressive scanning, ie non-interlaced. No intra-field motion (blending frames) or interlacing.
Leaders (Slate): No leaders (slate) before or after ad content

Audio Codec: AAC-LC or HE-AACv1

Audio Bitrate:
• 128-192 kbps for AAC-LC
• 64-128 kbps for HE-AACv1

Audio Channel: 2 channel stereo mix
Audio Sample Rate: 44.1 kHz or 48 kHz as per source material

Audio Levels:
• 24 LKFS (+/- 2.0 dB) in the US as per ATSC A/85
• 23 LUFS (+/- 1.0) in the EU as per EBU R128

3. Mezzanine Video (Recommended; Required for Hulu and premium video supply)

Bit Rate: 50Mbps VBR or 15-30 CBR 5
Aspect Ratio: 16:9 (HD) or 4:3 (SD)
Note: 16:9 is preferred "letter-boxing" (black bars) should be avoided

Resolution:
• Aspect Ratio 16:9 = 1920x1080 or 1280x720
• Aspect Ratio 4:3 = 1440x1080

Color Space: 4:2:0 or 4:2:2 YUV

Frame Rate:
Depending on region, use one of the following frame rates:
• PAL (25 fps)
• 24p (23.98 fps)
• NTSC Video (29.97 fps)

Codec:
• MPEG2, H.264/AAC
• H.264 or Apple ProRes
• H.265 /HEVC

Format: .mov or .mp4
Scan type: Progressive
Leaders (slate): Video creative should be submitted without leaders (slate) before ad content.
Configuration: Picture to Picture (P2P), No slate, No countdown leader, No bars, No tone

Audio Format: AAC
Audio Bitrate: 192 kbps (AAC)
Audio Channel: 2 channel stereo mix L&R
Audio Sample Rate: 49kHz
Audio Levels: DB - 12 (average)

THIRD PARTY SERVED

Supported 3rd party vast tag providers include:
• DCM
• Innovid
• Celtra
• Sizmek

Smartphone Interactive Pre-Roll (MRAID)

An interactive interstitial video ad that plays automatically in mobile apps - including games. Users can click-through to interactive expanded slates.

SUPPORTED SCREENS

Ads are delivered on Mobile Apps only.

ADOBE SERVED

We support VPAID 2 JS.
We do NOT support VPAID 2 Flash.

1. Video Asset (Required):
See below

• **Click-through URL (Required):**
  one single destination URL for video ads. URL must be secured (https://).

• **3rd party pixels (Optional)**

2. High Definition Video (required)

Video Codec: MP4/H.264

Resolution:
• 1280x720 for 720p
• 1920x1080 for 1080p

Bitrate:
• 1500-2500 kbps for 720p
• 2500-3500 kbps for 1080p

H.264 Profile/Level:
• High profile, level 3.1 for 720p
• High profile, level 4.0 for 1080p

Video Frame Rate:
• 29.970 fps for NTSC countries, commonly referred to as 30 fps
• 25 fps for PAL countries
• 23.976 fps for film-look content, commonly referred to as 24 fps

Video Color Space: 4:2:0 YUV Chroma Subsampling
Video Interlacing: Progressive scanning, ie non-interlaced. No intra-field motion (blending frames) or interlacing.
Leaders (Slate): No leaders (slate) before or after ad content

Audio Codec: AAC-LC or HE-AACv1

Audio Bitrate:
• 128-192 kbps for AAC-LC
• 64-128 kbps for HE-AACv1

Audio Channel: 2 channel stereo mix
Audio Sample Rate: 44.1 kHz or 48 kHz as per source material

Audio Levels:
• 24 LKFS (+/- 2.0 dB) in the US as per ATSC A/85
• 23 LUFS (+/- 1.0) in the EU as per EBU R128

THIRD PARTY SERVED

Supported 3rd party tag providers include:
• Celtra
• Sizmek
• Mixpo

Mobile (cont.)

Tablet Interactive Pre-Roll (MRAID)

An interactive interstitial video ad that plays automatically in tablet apps - including games. Users can click-through to interactive expanded slates.

SUPPORTED SCREENS

Ads are delivered on Tablet Apps only.

ADOBE SERVED

1. Video Asset (Required):

Max ad length
Max file size

- Click-through URL (Required):
  one single destination URL for video ads. URL must be
  secured (https://).
- Companion Banner (Optional)
- 3rd party pixels (Optional)

2. High Definition Video (required)

Video Codec: MP4/H.264

Resolution:
- 1280x720 for 720p
- 1920x1080 for 1080p

Bitrate:
- 1500-2500 kbps for 720p
- 2500-3500 kbps for 1080p

H.264 Profile/Level:
- High profile, level 3.1 for 720p
- High profile, level 4.0 for 1080p

Video Frame Rate:
- 29.970 fps for NTSC countries, commonly referred to as 30 fps
- 25 fps for PAL countries
- 23.976 fps for film-look content, commonly referred to as 24 fps

Video Color Space: 4:2:0 YUV Chroma Subsampling
Video Interlacing: Progressive scanning, ie non-interlaced. No intra-field motion (blending frames) or interlacing.
Leaders (Slate): No leaders (slate) before or after ad content

Audio Codec: AAC-LC or HE-AACv1

Audio Bitrate:
- 128-192 kbps for AAC-LC
- 64-128 kbps for HE-AACv1

Audio Channel: 2 channel stereo mix
Audio Sample Rate: 44.1 kHz or 48 kHz as per source material

Audio Levels:
- 24 LKFS (+/- 2.0 dB) in the US as per ATSC A/85
- 23 LUFS (+/- 1.0) in the EU as per EBU R128

3. Mezzanine Video (Recommended; Required for Hulu and premium video supply)

Bit Rate: 50Mbps VBR or 15-30 CBR 5
Aspect Ratio: 16:9 (HD) or 4:3 (SD)
Note: 16:9 is preferred "letter-boxing" (black bars) should be avoided

Resolution:
- Aspect Ratio 16:9 = 1920x1080 or 1280x720
- Aspect Ratio 4:3 = 1440x1080

Color Space: 4:2:0 or 4:2:2 YUV

Frame Rate:
Depending on region, use one of the following frame rates:
- PAL (25 fps)
- 24p (23.98 fps)
- NTSC Video (29.97 fps)

Codec:
- MPEG2, H.264/AAC
- H.264 or Apple ProRes
- H.265 /HEVC

Format: .mov or .mp4
Scan type: Progressive
Leaders (slate): Video creative should be submitted without leaders (slate) before ad content.
Configuration: Picture to Picture (P2P), No slate, No countdown leader, No bars, No tone

Audio Format: AAC
Audio Bitrate: 192 kbps (AAC)
Audio Channel: 2 channel stereo mix L&R
Audio Sample Rate: 49kHz
Audio Levels: DB - 12 (average)

THIRD PARTY SERVED

Supported 3rd party mraid tag providers include:
- Celtra
- Sizmek
- Mixpo

Tap-to-Play Banner (MRAID)

A 320x50 banner ad displayed at the top or bottom of apps. On click, an interactive video plays fullscreen.

SUPPORTED SCREENS

Ads are delivered on Mobile Apps only.

ADOBE SERVED

1. Banner Asset (Required):

Size: 320x50
Format: JPG, GIF, PNG

2. Video Asset (Required):

Max ad length
Max file size

- Click-through URL (Required):
  one single destination URL for video ads. URL must be
  secured (https://).
- Companion Banner (Optional)
- 3rd party pixels (Optional)

3. High Definition Video (Required)

Video Codec: MP4/H.264

Resolution:
- 1280x720 for 720p
- 1920x1080 for 1080p

Bitrate:
- 1500-2500 kbps for 720p
- 2500-3500 kbps for 1080p

H.264 Profile/Level:
- High profile, level 3.1 for 720p
- High profile, level 4.0 for 1080p

Video Frame Rate:
- 29.970 fps for NTSC countries, commonly referred to as 30 fps
- 25 fps for PAL countries
- 23.976 fps for film-look content, commonly referred to as 24 fps

Video Color Space: 4:2:0 YUV Chroma Subsampling
Video Interlacing: Progressive scanning, ie non-interlaced. No intra-field motion (blending frames) or interlacing.
Leaders (Slate): No leaders (slate) before or after ad content

Audio Codec: AAC-LC or HE-AACv1
Audio Bitrate:
- 128-192 kbps for AAC-LC
- 64-128 kbps for HE-AACv1

Audio Channel: 2 channel stereo mix
Audio Sample Rate: 44.1 kHz or 48 kHz as per source material

Audio Levels:
- 24 LKFS (+/- 2.0 dB) in the US as per ATSC A/85
- 23 LUFS (+/- 1.0) in the EU as per EBU R128

THIRD PARTY SERVED

Supported 3rd party vast / vpaid tag providers include:
- Celtra
- Sizmek
- Mixpo

Mobile (cont.)

Tap-to-Play Medium Rectangle

A 300x250 banner ad displayed in display space on mobile browsers. On click, a video plays fullscreen.

SUPPORTED SCREENS

Ads are delivered on Mobile & Tablet web browsers.

ADOBE SERVED

1. Banner Asset (Required):

Size: 320x50
Format: JPG, GIF, PNG

2. Video Asset (Required):

Max ad length
Max file size

• Click-through URL (Required):
  one single destination URL for video ads. URL must be
  secured (https://).
• Companion Banner (Optional)
• 3rd party pixels (Optional)

3. High Definition Video (required)

Video Codec: MP4/H.264
Resolution
• 1280x720 for 720p
• 1920x1080 for 1080p
Bitrate:
• 1500-2500 kbps for 720p
• 2500-3500 kbps for 1080p
H.264 Profile/Level:
• High profile, level 3.1 for 720p
• High profile, level 4.0 for 1080p
Video Frame Rate:
• 29.970 fps for NTSC countries, commonly referred to as 30 fps
• 25 fps for PAL countries
• 23.976 fps for film-look content, commonly referred to as 24 fps
Video Color Space: 4:2:0 YUV Chroma Subsampling
Video Interlacing: Progressive scanning, ie non-interlaced. No intra-field motion (blending frames) or interlacing.
Leaders (Slate): No leaders (slate) before or after ad content
Audio Codec: AAC-LC or HE-AACv1
Audio Bitrate:
• 128-192 kbps for AAC-LC
• 64-128 kbps for HE-AACv1
Audio Channel: 2 channel stereo mix
Audio Sample Rate: 44.1 kHz or 48 kHz as per source material
Audio Levels:
• 24 LKFS (+/- 2.0 dB) in the US as per ATSC A/85
• 23 LUFS (+/- 1.0) in the EU as per EBU R128

3. Mezzanine Video (Recommended; Required for Hulu and premium video supply)

Bit Rate: 50Mbps VBR or 15-30 CBR 5
Aspect Ratio: 16:9 (HD) or 4:3 (SD)
Note: 16:9 is preferred "letter-boxing" (black bars) should be avoided
Resolution:
• Aspect Ratio 16:9 = 1920x1080 or 1280x720
• Aspect Ratio 4:3 = 1440x1080
Color Space: 4:2:0 or 4:2:2 YUV
Frame Rate:
Depending on region, use one of the following frame rates:
• PAL (25 fps)
• 24p (23.98 fps)
• NTSC Video (29.97 fps)
Codec:
• MPEG2, H.264/AAC
• H.264 or Apple ProRes
• H.265 /HEVC
Format: .mov or .mp4
Scan type: Progressive
Leaders (slate): Video creative should be submitted without leaders (slate) before ad content.
Configuration: Picture to Picture (P2P), No slate, No countdown leader, No bars, No tone

Audio Format: AAC
Audio Bitrate: 192 kbps (AAC)
Audio Channel: 2 channel stereo mix L&R
Audio Sample Rate: 49kHz
Audio Levels: DB - 12 (average)

THIRD PARTY SERVED

Supported 3rd party mraid tag providers include:

• Celtra
• Sizmek
• Mixpo

Mobile Display Intersitial - Phone

An interactive display ad that plays automatically in mobile apps including games. Users can click-through to interactive expanded slates.

SUPPORTED SCREENS

Ads are delivered on Mobile Apps only.

ADOBE SERVED

1. Display Asset (Required):

Size: 320x480 or 480x320
Format: JPG, GIF, PNG

THIRD PARTY SERVED

Supported 3rd party mpaid tag providers include:

• Celtra
• Sizmek
• Mixpo

CAVEATS

A click-through URL is required.

Mobile Display Intersitial - Tablet

An interactive display ad that plays automatically in tablet apps including games. Users can click-through to interactive expanded slates.

SUPPORTED SCREENS

Ads are delivered on Tablet Apps only.

ADOBE SERVED

1. Display Asset (Required):

Size: 1024x768 or 768x1024
Format: JPG, GIF, PNG

THIRD PARTY SERVED

Supported 3rd party mpaid tag providers include:

• Celtra
• Sizmek
• Mixpo

CAVEATS

A click-through URL is required.

Audio

Audio

An audio advertisement that plays within content on digital environments including streaming content provider mobile apps and websites.

SUPPORTED SCREENS

Ads are delivered on Tablet, Desktop, Mobile, Smart Speakers, and Connected TV.

THIRD PARTY SERVED

Partner specific requirements allow both 1st and 3rd party served ads.

CAVEATS

Reach out to your Adobe Advertising account team for partner specific details beyond key partners provided in this guide.

3rd party pixels (Optional):
We recommend using SSL-compliant pixels to maximize your access to available inventory. Major providers are supported.

ADOBE SERVED

#Audio Asset (Required)

File types supported: MP3, OGG, AAC, WAV, SAC, WMA
Leaders (Slate): No leaders (slate) before or after ad content

Max File Size: 2MB
Bitrate: 128 bitrate
File Length: 0-60s

Spotify
• Length: Up to 30 seconds
• File Type: OGG
• Max File Size: 500MB
• Volume: RMS normalized to -14 dBFS Peak
normalized to -0.2 dBFS

SoundCloud
• Length: 6, 15, or 30 seconds
• File Type: MP3
• Max File Size: 5MB

Pandora
•Length: 15, or 30 seconds
•File Type: MP4 (in-app), MP3 (desktop)
•Max File Size: 2.2MB

TuneIn
• Length: 10, 15, or 30 seconds
• File Type: MP3, WMA, SAC, OGG, WAV
• Volume: 44.1 kHz

iHeartRadio
• Length: 5, 15, 30 or 60 seconds
• File Type: MP3
• Max File Size: 320kbps
• Volume: 44.1 kHz

TargetSpot
• Length: 15, 30 or 60 seconds
• File Type: MP3

$5a_ bS [a 4S`Vᵈ

Ad sizes supported:
• 640x640
• 300x250
• 600x500
• 1024x1024

Spotify
• Static JPG, PNG
• Max File Size: $" " =
• Size: % " j $ "

SoundCloud:
• Static JPG, PNG
• Max File Size: Under 400KB
• Size: 1024x1024

Pandora
• JPEG, GIF
• Max File Size: 100KB
• Mobile Size: 300x250
• Desktop Size: 300x250, 500x500

TuneIn:
• JPEG, JPG, PNG, GIF, HTML
• Max File Size: 2MB
• Size: 300x250

iHeartRadio:
• JPEG, JPG, PNG, GIF, SWF, HTML
• Max File Size: 2.2MB
• Size: 300x250

Connected TV

Standard (VAST)

A video ad that plays in fullscreen before the content (pre-roll), during the content (mid-roll), or after the content (post-roll), and cannot be skipped.

SUPPORTED SCREENS

Connected TV

ADOBE SERVED

1. Video Asset (Required):

Max ad length
Max file size
Ad size limited to 300x250

• Click-through URL (Optional)

• 3rd party pixels (Optional)

2. High Definition Video (required)

Video Codec: MP4/H.264

Resolution
• 1280x720 for 720p
• 1920x1080 for 1080p

Aspect Ratio: 16:9

Bitrate:
• 1500-2500 kbps for 720p
• 2500-3500 kbps for 1080p

Video Frame Rate:
• 29.970 fps for NTSC countries, commonly referred to as 30 fps
• 25 fps for PAL countries
• 23.976 fps for film-look content, commonly referred to as 24 fps

Video Color Space: 4:2:0 YUV Chroma Subsampling
Video Interlacing: Progressive scanning, ie non-interlaced. No intra-field motion (blending frames) or interlacing.
Leaders (Slate): No leaders (slate) before or after ad content

Audio Codec: AAC-LC or HE-AACv1

Audio Bitrate:
• 128-192 kbps for AAC-LC
• 64-128 kbps for HE-AACv1

Audio Channel: 2 channel stereo mix
Audio Sample Rate: 44.1 kHz or 48 kHz as per source material

Audio Levels:
• 24 LKFS (+/- 2.0 dB) in the US as per ATSC A/85
• 23 LUFS (+/- 1.0) in the EU as per EBU R128

3. Mezzanine Video (Recommended; Required for Hulu and premium video supply)

Bit Rate: 50Mbps VBR or 15-30 CBR 5
Aspect Ratio: 16:9 (HD) or 4:3 (SD)
Note: 16:9 is preferred "letter-boxing" (black bars) should be avoided

Resolution:
• Aspect Ratio 16:9 = 1920x1080 or 1280x720
• Aspect Ratio 4:3 = 1440x1080

Color Space: 4:2:0 or 4:2:2 YUV

Frame Rate:
Depending on region, use one of the following frame rates:
• PAL (25 fps)
• 24p (23.98 fps)
• NTSC Video (29.97 fps)

Codec:
• MPEG2, H.264/AAC
• H.264 or Apple ProRes
• H.265 /HEVC

Format: .mov or .mp4
Scan type: Progressive
Leaders (slate): Video creative should be submitted without leaders (slate) before ad content.
Configuration: Picture to Picture (P2P), No slate, No countdown leader, No bars, No tone

Audio Format: AAC
Audio Bitrate: 192 kbps (AAC)
Audio Channel: 2 channel stereo mix L&R
Audio Sample Rate: 49kHz
Audio Levels: DB - 12 (average)

THIRD PARTY SERVED

Supported 3rd party vast tag providers include:

• DCM
• Innovid
• Celtra
• Sizmek

Linear TV

HD / SD Master File Specifications

VERIFYING FILES

Please verify that final files met the file specifications outlined below before submitting. Common issues include the following:

• Incorrect 5.1 audio configuration
• Video glitches
• Extra frames at the beginning or end of a spot
• Inaccurate or incomplete slate information
• Audio content (Stereo or Dual Mono)

The specifications outlined must be met exactly in order to comply with station and publisher requirements. Incorrectly formatted files will be subjected to potential rejection.

	MPEG - HD Specs	Pro Res - HD Specs	MPEG - SD Specs
Stream Type	MPEG-2 Transport Stream	Apple ProRes 422 (HQ) - 1920x1080 23.98p or 60i 48kHz, 1280x720 60p 48 kHz	MPEG-2 Program or Transport Stream
Width/Height	1920x1080 (1080i) 1920x1080 (1080p) 1280x720 (720p)	1920x1080 (1080i) 1920x1080 (1080p) 1280x720 (720p)	720x512 or 720x480
Aspect Ratio	16:9	16:9	4:3
Pixel Aspect Ratio	Square	Square	9:10 (D1 Pixels)
Frame Rate	29.97 (1080i) 23.98 (1080p) 59.94 (720p)	29.97 (1080i) 23.98 (1080p) 59.94 (720p)	29.97 fps
Video Bit Rate	45 Mbps - Constant	Default	20 Mbps - Constant
GOP	Long GOP (IBBP)	Default	Long GOP
Chroma	4:2:2 (HP@HL)	4:2:2	4:2:2
Interlacing	1080i (Upper/top field first) 1080p (Progressive) 720p (Progressive)	1080i (Upper/top field first) 1080p (Progressive) 720p (Progressive)	Upper/top field firt
Audio Type	PCM or MPG (384 kbps)	PCM	MPEG Layer 2
Audio Sample Rate	48 kHz	48 kHz	48 kHz
Audio Bits/Sample	16 bit or 24 bit	16 bit or 24 bit	384 kbps
Audio Encoding	MPEG-1 Layer 2	SMPTE 302M	-
Channels	2 - Stereo	2 channels or 8 channels	-
Channel 1	Stereo Left	Left Front	-
Channel 2	Stereo Right	Right Front	-
Calm Act	-24 LKFS, +/-2dB	-24 LKFS, +/-2dS	-
Peak Audio	Below -2dBTP	Below -2dBTP	-

Linear TV (cont.)

General Specification and Requirements

CONTENT LAYOUT

• No pre-slate black
• 5 seconds of slate
• For HD spots, slates should include Audio Type (Stereo/Surround)
• 2 seconds of black/silence
• Content to exact length
• No post-spot black

SLATE REQUIREMENTS

Slates must be on all content and include:
• Spot ID code (ISCI/Ad-ID)
• Spot title
• Spot length
• No audio

FILE NAMING CONVENTIONS

The filename should be the ISCI or Ad-ID code with no spaces, dashes or other characters, plus ".mpg" or ".mov" (for example - "ZYWX9876" or "ZYWX9876.mov"). Additionally, HD filenames should also include an "H" at the end of the ISCI to identify it as an HD spot (for example - "ZYWX9876H.mpg"). The "H" in the ISCI is required in the slate as well. Please also note that it is important that an HD spot is marked as HD within the metadata of the creative.

SAFE TITLE, CLOSED CAPTIONING, AND MISCELLANEOUS GUIDELINES

Safe Title Specifications

• Supers should be within the borders of safe action or 90% viewing area
• HD Spots must be Center Cut Protected
• HD Spots that are not Center Cut Safe will be letterboxed when down-converted to SD

Closed Captioning Specifcations

• If sending HD files with closed captions, masters must be sent with a frame rate of either 29.97 fps or 59.94 fps (23.98 fps is not currently supported)
• The first trigger for closed-captioned filed must be married to the first frame of the video
• The first closed captioned line should be "paint on"
• If HD or SD spot is closed captioned, it must be notated within the metadata

Miscellaneous Guidelines

• Disclaimers must be legible
• Only submit one spot per file
• We will not accept spots that include any of the following encodings: Spottrac, VEIL, or Teletrax
• We prefer "clean" spots with no encodings
• Note: A correctly formatted 30s spot will have a total duration of 37 seconds (include slate and black frames) and a total of 1109 frames at 29.97 fps. In other words, the start of the video content will be at the 7 second mark with no black after the video content.
• Note: The spot must start on frame 210 at 29.97 fps (frame 168 for 23.98 fps). Creative content must run to the last frame of the spot with no black at the tail for total of 1109 frames at 29.97 fps (or 887 frames for 23.98 fps) unless the black is a part of the content. There should be no extra frames after the creative.

Addressable TV

HD / SD Master File Specifications

VERIFYING FILES

Please verify that final files met the file specifications outlined below before submitting. Common issues include the following:

• Incorrect 5.1 audio configuration
• Video glitches
• Extra frames at the beginning or end of a spot
• Audio content (Stereo or Dual Mono)
• Slates added (Addressable TV spots should not have sales)

The specifications outlined must be met exactly in order to comply with station and publisher requirements. Incorrectly formatted files will be subjected to potential rejection.

	MPEG - HD Specs	Pro Res - HD Specs	MPEG - SD Specs
Stream Type	MPEG-2 Transport Stream	Apple ProRes 422 (HQ) - 1920x1080 23.98p or 60i 48kHz, 1280x720 60p 48 kHz	MPEG-2 Program or Transport Stream
Width/Height	1920x1080 (1080i) 1920x1080 (1080p) 1280x720 (720p)	1920x1080 (1080i) 1920x1080 (1080p) 1280x720 (720p)	720x512 or 720x480
Aspect Ratio	16:9	16:9	4:3
Pixel Aspect Ratio	Square	Square	9:10 (D1 Pixels)
Frame Rate	29.97 (1080i) 23.98 (1080p) 59.94 (720p)	29.97 (1080i) 23.98 (1080p) 59.94 (720p)	29.97 fps
Video Bit Rate	45 Mbps - Constant	Default	20 Mbps - Constant
GOP	Long GOP (IBBP)	Default	Long GOP
Chroma	4:2:2 (HP@HL)	4:2:2	4:2:2
Interlacing	1080i (Upper/top field first) 1080p (Progressive) 720p (Progressive)	1080i (Upper/top field first) 1080p (Progressive) 720p (Progressive)	Upper/top field firt
Audio Type	PCM or MPG (384 kbps)	PCM	MPEG Layer 2
Audio Sample Rate	48 kHz	48 kHz	48 kHz
Audio Bits/Sample	16 bit or 24 bit	16 bit or 24 bit	384 kbps
Audio Encoding	MPEG-1 Layer 2	SMPTE 302M	-
Channels	2 - Stereo	2 channels or 8 channels	-
Channel 1	Stereo Left	Left Front	-
Channel 2	Stereo Right	Right Front	-
Calm Act	-24 LKFS, +/-2dB	-24 LKFS, +/-2dS	-
Peak Audio	Below -2dBTP	Below -2dBTP	-

Addressable TV (cont.)

General Specification and Requirements

CONTENT LAYOUT

• 2 seconds of black/silence
• Content to exact length
• No post-spot black

SLATE REQUIREMENTS

• No slate on all content

FILE NAMING CONVENTIONS

The filename should be the ISCI or Ad-ID code with no spaces, dashes or other characters, plus ".mpg" or ".mov" (for example - "ZYWX9876" or "ZYWX9876.mov"). Additionally, HD filenames should also include an "H" at the end of the ISCI to identify it as an HD spot (for example - "ZYWX9876H.mpg"). The "H" in the ISCI is required in the slate as well. Please also note that it is important that an HD spot is marked as HD within the metadata of the creative.

SAFE TITLE, CLOSED CAPTIONING, AND MISCELLANEOUS GUIDELINES

Safe Title Specifications

• Supers should be within the borders of safe action or 90% viewing area
• HD Spots must be Center Cut Protected
• HD Spots that are not Center Cut Safe will be letterboxed when down-converted to SD

Closed Captioning Specifcations

• If sending HD files with closed captions, masters must be sent with a frame rate of either 29.97 fps or 59.94 fps (23.98 fps is not currently supported)
• The first trigger for closed-captioned filed must be married to the first frame of the video
• The first closed captioned line should be "paint on"
• If HD or SD spot is closed captioned, it must be notated within the metadata

Miscellaneous Guidelines

• Disclaimers must be legible
• Only submit one spot per file
• We will not accept spots that include any of the following encodings: Spottrac, VEIL, or Teletrax
• We prefer "clean" spots with no encodings

Video On Demand

	HD Video Format	SD Video Format
Stream Type	MPEG-2 Transport Stream	MPEG-2 Program Stream
Video Bit Rate	20 - 100 Mbps (CBR or VBR)	12 - 30 Mbps (CBR or VBR)
Frame Rate	29.97 (1080i), 59.94 (720p)	29.97 fps
Aspect Ratio	16:9	4:3
Width/Height	1920x1080 (1080i), 1280x720 (720p)	720x486/512
Audio Type	MPEG-1 Layer 2	MPEG-1 Layer 2

	HD Audio	SD Audio
Encoding Type	MPEG-1 Layer 2	MPEG-1 Layer 2
Number of Channels	2 (Stereo)	2 (Stereo)
Channel 1	Stereo Left	Stereo Left
Channel 2	Stereo Right	Stereo Right
Bit Rate	384 Kbps	384 Kbps
Bit Depth	16	16

Notes

https://support.google.com/displayspecs/answer/6244553

https://support.google.com/displayspecs/answer/187449?hl=en