```
<Metadata
xsi:schemaLocation="http://www.amazon.com/UnboxMetadata/v1 https://s3.amazonaws.com/aiv-external/AIV Metadata INTL-
1.4.2.xsd"
    xmlns="http://www.amazon.com/UnboxMetadata/v1"
    xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
    country="US"
    version="INTL-1.4.2">

<Metadata
xsi:schemaLocation="http://www.amazon.com/UnboxMetadata/v1 https://s3.amazonaws.com/aiv-external/AIV Metadata INTL-
1.6.1.xsd"
    xmlns="http://www.amazon.com/UnboxMetadata/v1"
    xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
    country="GLOBAL"
    version="INTL-1.6.1">
```

8.5.3. Country Identifier

Metadata submissions require a country attribute in the <Metadata> header element. Metadata submissions can only specify a single country:

- Currently supported country attributes include: DE, GB, JP, US and GLOBAL
- Use GLOBAL for any country other than DE, GB, JP, and US.

```
<Metadata
xsi:schemaLocation="http://www.amazon.com/UnboxMetadata/v1 https://s3.amazonaws.com/aiv-external/AIV Metadata INTL-
1.4.2.xsd"
xmlns="http://www.amazon.com/UnboxMetadata/v1"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
country="JP"
version="INTL-1.4.2">
```

8.6. Unique Territory Metadata Submission

It is currently required that a separate metadata file must be received for every territory of intended delivery (US, UK, DE, JP, GLOBAL.) The primary differences are the following:

- Ensure the Country Identifier in the Header is updated appropriately
- Genre list provided is unique for each territory, and each submission is to contain the appropriate genres mapped to the regions of submission
- JP and DE regional metadata should be localized.
 - OV submissions to DE are accepted
- JP submissions require additional fields found in <u>Section 21</u>

9. Images

9.1. Editorial Guidelines

These guidelines apply to all images for a title. Differences in Movie and TV Season title artwork are specifically called out below.

9.1.1. Orientation

Amazon uses different image orientations to distinguish Movie and Television content.

- All Movie images must be in 3:4 aspect ratio.
- All TV Images (both Season-level and Episode-level) are required to have a 4:3 aspect ratio.

9.1.2. Requirements

- Images must include the name of the feature or series they accompany.
 - Localized Images are acceptable for the US, UK, DE, and JP marketplaces. For all other marketplaces, only the OV image will be published. Other localized images may be delivered for future use. For OV/OMU versions of a title you may use images that contain text in the title's original language.
- Images are required for all movie content.
- Season-level images are required for all TV content. Each season of a series must be delivered with an image.
- Season-level images should contain the name of the Series and the Season number, or other designation such as volume number.
- Images must not contain mature or audience-restricted elements.
- Amazon adds a "UHD" and/or "Prime" sash in the upper left-hand corner of the image for relevant titles (illustrated in 9.2). It is preferable for images not to include critical material in this area of the image. The size of "UHD" and "Prime" sashes may change depending on client interface.
- Bugs, Logos and Watermarks
 - o No references to other formats or format-specific logos. ("Now on DVD," Blu-Ray logos, etc.)
 - No studio or network logos.
 - o No callouts to external websites or other distribution platforms.
- Avoid the following image elements that can degrade the quality of the image:
 - Theatrical release dates
 - Images with thin borders as they may lose them completely or partially when scaled down for use in certain client interfaces
 - Small text as it becomes unreadable on many client interfaces when scaled to size
 - Padding (letterboxing or pillarboxing) images into spec

9.1.3. Season Vs Episodic Images

- Episode-level images are strongly-preferred for TV content, but not required. If supplying episodic images, a separate season-level image is still required. If supplying episode-level images, every episode within a season must have an episode-level image (excluding bonus content such trailers, season recaps, sneak peeks, etc.).
- Episode-level images should be screenshots from that episode.
 - Episode images should be cropped to a 4:3 aspect ratio similar to other Episode image files. For SD episodes, the resolution of the Episode image can be as low as 640x480.
 - o Episode images should contain persons or objects representative of the episode.
 - Episode images should <u>NOT</u> contain:
 - Spoilers for the plot of the episode. (For elimination-based reality TV shows, attempt to keep
 the competitors' identities obscured as much as possible as the season progresses so as not
 to reveal winners/losers.)
 - On-screen text. (Title treatment, credits, subtitles, etc.)
 - Drug use, nudity or sexually suggestive content.
 - Someone harming or fighting another individual, or guns or other weapons.
 - If an image containing a weapon cannot be avoided, please avoid images with weapons pointed directly at the viewer or an individual in the video.
- For delivery of episodic-level images via Amazon Video Simple Asset Manifest, see example in <u>Section 13.1</u>.
- For delivery of episodic-level images via file naming convention, simply specify season Vs episodic Unique ID.

[PartnerAlias]-[SeasonUniqueID]-[ContentType]-[AssetType]-[LanguageCode]-

[PartnerAlias]-[EpisodicUniqueID]-[ContentType]-[AssetType]-[LanguageCode]-

For delivery of episodic-level images via MMC to our Global marketplace, the episodic image must be mentioned in the inventory (<u>Section 14.2.2.1.</u>), it must have its own unique picture group ID (<u>Section 14.2.2.4.</u>), and that picture group ID must be referenced within its own episodic experience ID (<u>Section 14.2.2.5.</u>).

```
Inventory:
 <manifest:Image ImageID="md:imageid:org:amazon studios:uniqueID S1E1:art.episode">
  <md:Width>1600</md:Width>
  <md:Height>1200</md:Height>
  <md:Encoding>jpg</md:Encoding>
     <md:Language>en</md:Language>
  <manifest:ContainerReference>
   <manifest:ContainerLocation>file://Season1Episode1Art-2016.jpg</manifest:ContainerLocation>
  </manifest:ContainerReference>
 </manifest:Image>

    Picture Group ID:

 <manifest:PictureGroups>
<!—PictureGroup containing the image for storefront page. -->
   <manifest:PictureGroup PictureGroupID="md:picturegroupid:org:amazon studios:uniqueID S1:picturegroup">
    <manifest:Picture>
      <manifest:PictureID>md:pictureid:org:amazon studios:uniqueID S1:picture.series
      <manifest:ImageID>md:imageid:org:amazon studios:uniqueID S1:art.series
    </manifest:Picture>
   </manifest:PictureGroup>
   <manifest:PictureGroup PictureGroupID="md:picturegroupid:org:amazon studios:uniqueID S1E1:picturegroup">
    <manifest:Picture>
      <manifest:PictureID>md:pictureid:org:amazon_studios:uniqueID_S1E1:picture.episode</manifest:PictureID>
      <manifest:ImageID>md:imageid:org:amazon studios:uniqueID S1E1:art.episode
    </manifest:Picture>
   </manifest:PictureGroup>
 </manifest:PictureGroups>
       Experience:
 <manifest:Experiences>
   <!-- Full Experience of the original edit, with a playable sequence-->
   <manifest:Experience ExperienceID="md:experienceid:org:amazon studios:uniqueID S1E1" version="1.0">
    <manifest:Audiovisual ContentID="md:cid:org:amazon_studios:uniqueID_S1E1">
     <manifest:Type>Main</manifest:Type>
     <manifest:SubType>Feature</manifest:SubType>
 <manifest:PlayableSequenceID>md:playablesequenceid:org:amazon_studios:uniqueID_S1E1
 uenceID>
    </manifest:Audiovisual>
    <manifest:PictureGroupID>md:picturegroupid:org:amazon studios:uniqueID S1E1
   </manifest:Experience>
   <manifest:Experience ExperienceID="md:experienceid:org:amazon studios:uniqueID S1" version="1.0">
    <manifest:PictureGroupID>md:picturegroupid:org:amazon_studios:uniqueID_S1
   </manifest:Experience>
   </manifest:Experiences>
```

9.2. Image Technical Specifications

Resolution

o TV: Preferred: 2560 x 1920, Minimum: 1600 x 1200

o Movie: Preferred: 1920 x 2560, Minimum: 1200 x 1600

o Images exceeding 10,000 pixels on any side are rejected

Aspect Ratio

TV: 4:3Movie: 3:4

Format: JPEG or PNGColor Space: RGB

Example Image Resolutions

TV (4:3)

3200 x 2400

2560 x 1920 *

Preferred

2400 x 1800

2000 x 1500

1600 x 1200

Movie (3:4)

2400 x 3200

1920 x 2560 *

Preferred

1800 x 2400

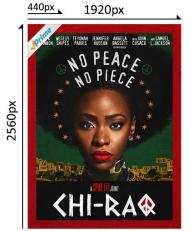
1500 x 2000

1200 x 1600

TV (4:3)

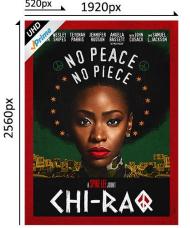
Movie (3:4)





Double Sash





10. Timed Text

Amazon Video supports delivery of discrete assets to enable the display of subtitles, closed captions, and forced subtitles in multiple languages for a single video mezzanine. All timed text assets must be conformed to match the Video Mezzanine they are intended to accompany prior to delivery to Amazon. Whenever available, Amazon Video prefers to receive captions/SDH over subtitles to provide an enhanced viewing experience to customers who are deaf or hard of hearing.

Captions/SDH: Timed Text that includes both spoken dialogue and atmospherics for the deaf and hard of hearing.

Subtitles: Timed text assets that provide on-screen text of the program dialogue.

Forced Subtitles: Forced Subtitles (also known as Forced Narratives) translate on-screen text or foreign dialogue that is in a different language than the rest of the audio content of the feature.

10.1. Technical Guidelines for Timed Text

Amazon accepts the following file types for delivery of timed text:

- DFXP Full / TTML (Timed Text Markup Language) with a .dfxp file extension.
- Lambda Cap with a .cap file extension
- EBU-STL with a .stl file extension.
- iTT (iTunes Timed Text) files with a .iTT file extension.
- SCC (Scenarist Closed Caption) with a .scc file extension.
- SMPTE-TT (RP-2052) with an .xml file extension.
- SR^T

10.1.1. Timed Text Frame Rates and Drop / Non-Drop Frame Indication

Amazon allows a wide range of timed text formats, some of which do not natively include Frame Rate or Drop / Non-Drop values. In general, if the time code format is in clock time (i.e. hh:mm:ss.sss), you do not need to send Frame Rate or Drop/Non Drop information. If it is in a frame-based format (i.e. hh:mm:ss:ff or hh:mm:ss;ff), then you must send both Frame Rate and Drop/Non Drop information via the file name convention, Amazon Asset Manifest or MMC Manifiest. Depending on the specification and namespace used (TTML or TTAF) in DFXP, XML and ITT files, Amazon will use either the ITML timebase accordingly for parsing. The table below summarizes the Timed Text formats that Amazon accepts and whether that information must be included in the delivery manifest document or not. Information provided via delivery manifests will take priority over assumed default values found in the header metadata of the timed text file.

10.1.2. Timed Text Positioning and Styling

In the GLOBAL marketplace, Amazon supports positioning information in order to ensure that display of timed text does not obscure the legibility of other onscreen elements. Absolute values like number of pixels are not acceptable, as they could cause text to display incorrectly on some screen sizes. Also note that not all devices support this information. For devices that do not support style/positioning information, as well as for titles in the US, GB, DE, and JP marketplaces, default styling is applied.

Not all file formats support various positioning and styling features for timed text. The below matrix also illustrates support for these features by file type.

10.1.3. Timed Text Matrix

		Required in Mani	fest / Filename?	Style and Positioning Support					
File Extension	Timecode Format	Allowed	Framerates	Frame Rate (29.97 assumed if blank)	Drop/Non-Drop Frame (NDF assumed if blank)	Positioning	Vertical Subtitles	Styling	Other
EBU-STL		24, 25, 3	80 (NDF)		No	Horizontal,	No	Italics, Bold,	
SCC	Frame based	Drop	Non-Drop	Yes		Exact	NO	Underline	
CAP		29.97 <i>,</i> 59.94	23.976, 23.98, 24,	Yes, if frame-			Yes	Italics, Bold	Ruby Support
DFXP	Frame based or	33.34	25, 29.97,		Yes, only if framerate is 29.97 or 59.94.	Horizontal, Vertical,	Left to		
XML	ClockTime 59.94	· ·	·		*	Exact	Right, Italics, Bold, Right to Underline	Unicode Support	
ITT	based						Left		
SRT	ClockTime based	N/A		N/A	N/A	None	No	None	

10.1.4. Full Subtitles Requirements

Any Subtitle, Closed Caption, or SDH file delivered as part of an MLF package must contain a full translation of all spoken dialogue and narrative text that should be understood by the audience. This includes any Forced Subtitles for that title as well. For video mezzanines containing burned-in text, any translations that need to be displayed simultaneously to text that is burned-in must include accompanying positioning information to ensure the text will not overlap.

10.1.5. Forced Subtitles Requirements

Forced Subtitles are timed text assets where display of the content is required for creative intent. For example, a title that contains sections of dialogue in a language that differs from that of the main feature, and therefore requires translation in order to understand the narrative. If a title contains forced narrative content, delivery of separate forced narrative assets are required for each language available in an MTA package. The language the Forced Subtitles are displayed in will match the audio language the customer is currently streaming.

10.1.6. Time Code Offset

Amazon currently does not support time code offsets. All timed text files must be submitted with a 00:00 offset in order to conform to the video mezz file.

10.1.7. Character Support

Amazon supports the UTF8 character set with the exception of musical notes.

11. Video Mezzanine

This following section covers the technical requirements for delivering video source files to Amazon Video. For specifics on UHD/4K title delivery, see Section 13.3.4 – Ultra-High-Definition.

11.1.1. Video Requirements

 Content must be trimmed to only contain the program material. Non-program content such as bars & tone, test patterns, production slates, textless material, or extended commercial blacks must be removed before delivery.

• Letterboxing and pillarboxing no longer needs to be removed from video sources prior to delivery.

Automated cropping will be performed during the transcode process so that final target encodes will include active picture only. Please ensure that letterboxing and pillarboxing are symmetrical.

- Advertisements, Bugs, Logos and Watermarks
 - No non-program advertisements.
 - If an ad is part of the program, it may stay (ie: sponsorships, product placement, parody, etc)
 - No studio or network logos.
 - No callouts to external websites or other distribution platforms.
- Amazon can accept video sources in either progressive or interlaced formats. See <u>Section 11.1.3 Content</u> <u>Processing Guidelines for more information.</u>
- The frame rate of the mezzanine file must be constant. Variable frame rate sources will be rejected.
- The file header metadata must accurately describe the following:
 - Scan Type: Interlaced or Progressive
 - o Field Order (Bottom Field First or Top Field First) if video source is interlaced.
 - Display Aspect Ratio:
 - Anamorphic content must have correct 4x3 or 16x9 display aspect ratio flags.
- If display aspect ratio is not flagged in the header of your mezzanines, you must supply this information in an Asset Manifest or MMC Manifest.
- VITC timecode and other ancillary data must be cropped prior to delivery.
- If saving video out of QuickTime Player, the display size in the View window must be saved to Normal Size before delivery to Amazon. In the Movie Inspector window, Current Size must match Normal Size.
- MTA Mezzanines delivered with Multi Track Audio packages should be semi-textless or textless, with the removal of the embedded Forced Narratives.
- **STA** Mezzanines delivered with Single Track Audio SHOULD contain the Forced Narrative of the audio language contained within the mezz.

11.1.2. Embedded Audio Requirements

- All audio tracks in a given source file must be in the same language. Multiple language tracks within a single source are not allowed. For instructions on delivering multi-language files please see <u>Section 14 – Multi</u> Language Audio
- The soundtrack must only contain program audio. Music & Effects, silent tracks, MOS, commentary and any other non-program audio must be removed.
 - Silent tracks are defined as tracks with an RMS less than -80db.
- Audio duration and video duration must match exactly.
- All audio tracks in a given source file must be the same bit depth. For example, an 8-channel MPEG-2 TS
 which has a 24-bit surround sound track must have a 24-bit stereo track. A 24-bit track and a 16-bit track
 embedded in the same video will be rejected.
- **Surround Sound Channel Layout**: Amazon requires the following audio channel mapping. Incorrectly mapped audio will cause customer-facing defects and will be rejected.
 - o 1-Channel Mono
 - o 2-Channel Stereo: L-R
 - o 6-Channel 5.1 Surround Sound: L-R-C-LFE-LS-RS
 - 8-Channel 5.1 Surround Sound+Stereo: L-R-C-LFE-LS-RS-Lstereo-Rstereo
- All audio tracks in .mov and .mp4 files must be enabled in the QuickTime Player Video Properties window.
 Content with disabled audio tracks will be rejected.

11.1.3. Content Processing Guidelines

You should only transcode to a new format for Amazon Video if your archived mezzanines do not meet the above guidelines. For acceptable transcoding profiles, please refer to the tables on the following pages. Any video processing must follow industry best-practices for creating high-quality video mezzanines. Content with obvious artifacting or quality loss due to improper processing will be

rejected. Amazon requires that content be delivered with interlace and letterboxing intact if the provider is not capable of performing high quality video transformations.

Amazon requires that source mezzanines have frame rates native to the title's production. Content originally produced at 23.976p or 24p which was telecined to 29.97i should receive inverse-telecine and be delivered at native 24 or 23.976fps.

Amazon will not accept sources that have been upscaled or upsampled.

11.1.4. Video Mezzanine Validation

To minimize delivery of out-of-spec video assets, testing with Interra's Baton software can be used to perform automated QC on video mezzanines prior to delivery. Below are some common issues.

- Non-standard display aspect ratios
- Resolutions that do not meet our minimum requirements for SD, HD, or UHD delivery.
- Too many audio channels
- Too few audio channels
- Improper color space
- Mismatched video and audio durations
- Non-standard frame rates
- Field dominance errors
- Telecine/cadence issues
- Long silent periods
- Audio dropouts

11.1.5. HD Mezzanine Specification						
High	Video Codec	ProRes 422	MPEG-2	AVC / H.264		
Definition		HQ				
	Container	.MOV	MPG, MPEG, M2P, M2T, M2TS, TS	MP4, M2T, TS		
Video	Profile	HQ	Main or High	High		
	Level	n/a	High	4.1		
HD must be >	Preferred Bit Rate	88 Mbps or	80 Mbps or higher	30 Mbps or		
1280 pixels		higher		higher		
horizontally	Minimum Bit Rate	n/a	50 Mbps	20 Mbps		
OR <u>></u> 720	Key Frame Interval	n/a	1 Second or Less	2 Seconds or		
pixels			I-frame Only Preferred	Less		
vertically	Display Aspect Ratio	4:3, 1.66:	1, 16:9, 1.85:1, 2:1, 2.20:1, 2.35:1, 2.3	39:1 , 2.40:1		
	Scan Type	Progressive or Interlaced				
	Color Space	Rec. 709				
	Chroma Subsampling	4:2:0, 4:2:2				
	Chroma Bit Depth		8-bit, 10-bit			
	Constant Frame Rate	23.97	6p 24p, 25i, 25p, 29.97i, 29.97p, 30i, i	30p, 60i		

Embedded Audio	Audio Codec	PCM (ipcm)	MPEG-2 Layer II	AC-3	AAC		
Audio	Applies to Video Format	ProRes 422 or MPEG-2	MPEG-2	H.264 or	MPEG-2		
	Minimum Bit Rate	Lossless	ST: 384k	ST: 192kbps 5.1: 448k	ST: 320k		
	Sample Rate	48kHz					
	Bit Depth		16bit, 24bit				
	Mono Layout		1-Channel				
	Stereo Layout	2-Channel: L-R					
	5.1 Layout	6-Channel: L-R-C-LFE-LS-RS					
	5.1+Stereo Total	8-Channel: L-R-C-LFE-LS-RS-Lstereo-Rstereo					
	Layout						

11.1.6. SD Mezzanine Specification

11.1.6. SD Wezzanine Specification							
Standard	Video Codec	ProRes 422 HQ	MPEG-2	AVC / H.264			
Definition	Container	MOV	MPG, MPEG, M2P, M2T, M2TS,	MP4, M2T, TS			
			TS, PS				
Video	Profile	HQ	Main or High	High			
	Level	n/a	High	4.1			
SD must be >	Preferred Bit rate	50 Mbps or	50 Mbps or higher	15 Mbps or			
640 pixels		higher		higher			
horizontally	Minimum Bit Rate	n/a	15 Mbps	10 Mbps			
AND ≥ 260	Key Frame Interval	n/a	1 Second or Less	2 Seconds or			
pixels			I-frame Only Preferred	Less			
vertically	Display Aspect Ratio	4:3, 1.66:1,	16:9, 1.85:1, 2:1, 2.20:1, 2.35:1, 2.3	9:1 , 2.40:1			
	Scan Type		Progressive or Interlaced				
	Color Space	Rec. 601					
	Chroma Subsampling	4:2:0, 4:2:2					
	Chroma Bit Depth	8-bit, 10-bit					
	Constant Frame Rate	23.976բ	o 24p, 25i, 25p, 29.97i, 29.97p, 30i, 3	0p, 60i			

Embedded Audio	Audio Codec	PCM (ipcm)	MPEG-2 Layer II	AC-3	AAC		
Audio	Applies to Video	ProRes 422 or MPEG-	MPEG-2	H.264 or MPEG-2			
	Format	2					
	Minimum Bit Rate	Lossless	ST: 384k	ST:	ST: 320k		
				192kbps			
				5.1: 448k			
	Sample Rate	48kHz					
	Bit Depth		16bit, 24bit				
	Mono Layout	1-Channel					
	Stereo Layout	2-Channel: L-R					
	5.1 Layout	6-Channel: L-R-C-LFE-LS-RS					
	5.1+Stereo Total 8-Channel: L-R-C-LFE-LS-RS-Lstereo-Rstereo						
	Layout						

12. Trailers

Amazon Video supports trailers for Movie content only. The following requirements apply to trailers:

- Trailers must be approved for all audiences. "Red Band" trailers and any trailers with nudity, graphic violence, adult language will not be accepted.
- Trailers promoting a locally dubbed version Single Language Audio version of a title must contain audio
 dialogue that matches that dubbed language. If both dubbed and OV versions of a title are available in a
 single marketplace, it is preferable to have multiple trailers to promote both versions. For GLOBAL MTA
 trailers submissions, provide the OV trailer only.
- Amazon Video prefers to receive the final theatrical trailer, or most recent trailer if re-released to theaters. It is preferable that the source for the trailer to match the native aspect ratio of the movie.
- Trailers with dialogue in a language different than the primary language of the marketplace they are being delivered for must have subtitles burned-in to the video.
- Trailer must not exceed six (6) minutes in runtime.

Unless otherwise permitted by contract, all promotional material must be free and clear of any "Call to Action" information. The term "Call to Action" refers to any auditory or visual references to any of the following:

- Theatrical release timeframes (e.g. "Theatrical Release Date", "Coming Soon", "This Summer").
- Distribution format or services (e.g. "Now on DVD & Blu-Ray", "Available on iTunes").
- Website/Social Media call outs (e.g. www.mymovie.com, @mymovie, www.facebook.com/mymovie).

13. Single Track Audio (STA) Delivery

Single Track Audio is defined by the title only containing the audio contained within the mezzanine. The title will only support one primary audio language. If it is intended that a title has additional audio languages at a later date, the title is best delivered to the Multi Track Audio specification found in Section 14 or it will need to be redelivered per the Multi Language Audio spec when other audio

languages are being added. It is important to note that STA titles CAN be delivered via the Multi Track Audio specification, but MTA titles CANNOT be delivered via the STA spec.

13.1. Amazon Video Simple Asset Manifest

The optional Asset Manifest section allows partners to deliver source files without adhering to the Amazon Video file naming convention (described in detail in Section 13.2 – File Naming Convention). The manifest includes necessary information that would otherwise be communicated in the filename. This includes the non-conformed filenames used, their Unique IDs, and technical details such as frame rate and drop frame/non drop frame values for timed text assets. For examples, and a full list of metadata fields in the Asset Manifest, please see Section 17.1.4 – Asset Manifest. This manifest can be included alongside the XML Title Metadata or be delivered as a separate file.

The ability to parse file properties from the asset manifest instead of the file naming convention is managed at the delivery account level. This means that in order to parse these details from the manifest, all files delivered via an asset manifest-enabled delivery account must be referenced by an Asset Manifest. If you are a post house delivering on behalf of multiple providers, this means that deliveries you make on behalf of all providers must include an asset manifest in order to be able to leverage this feature of our platform. Otherwise, you must continue to use our file naming convention to communicate file details.

Migration to delivery via Asset Manifest requires Amazon Video to make manual configuration changes to your partner delivery account. If you want to use the AV Asset Manifests, please contact your Partner Relationship Manager for details.

Finally, please note that if you are delivering the exact same asset to multiple regions the file name must be modified in some way to differentiate the two sources. This is required, even for sources accompanied by an Asset Manifest.

The following is an example of an Asset Manifest describing a delivery that includes the following: season-level artwork (separate UniqueID & <AssetManifest> section), TV episode-level artwork, TV episode video source, and a captions file. This example includes all required and non-required attributes.

```
<AssetManifest>
<PartnerName>Titan</PartnerName>
<UniqueID>ExplosionsTheSeries Season1</UniqueID>
<Content type="full">
<Asset type="artwork">
<Filename>ExplosionsTheSeries S1-Image-English.jpg</Filename>
 <a href="mage.width">1600</attribute>
<a href="mage.height">1200</attribute>
</Content>
</Asset>
</AssetManifest>
<AssetManifest>
<PartnerName>Titan</PartnerName>
<UniqueID>ExplosionsTheSeries S1E1</UniqueID>
<Content type="full">
<Asset type="artwork">
```

```
<Filename>ExplosionsTheSeries-101-OV.jpg</Filename>
<a href="mage.width">1600</attribute>
<a href="mage.height">1200</attribute>
</Asset>
<Asset type="source" locale="en-US">
<Filename>ExplosionsTheSeries-101-OV.mp4</Filename>
   <DisplayAspectRatio>16:9</DisplayAspectRatio>
   <FieldType>bottom field first</FieldType>
<Checksum>fcfd2899ee3b790e53a2ec37c213eee9</Checksum>
</Asset>
<TimedTextAsset locale="en-US">
<Filename>ExplosionsTheSeries 101-ECC.dfxp</Filename>
  <a href="timedText.frameRate">29.97</attribute>
<a href="delta">Attribute name="timedText.drop">NDF</attribute>
<Type>Caption</Type>
  </TimedTextAsset>
</Content>
</AssetManifest>
```

13.1.1. Defining a Video Source in the Asset Manifest

The following illustrates an example of XML describing a video source file in the Asset Manifest. When using the Asset Manifest to detail video source deliveries, it is required to include - and the <Filename>. When delivering AVI files that do not contain file header information, <DisplayAspectRatio> and <FieldType> are also required. These two fields are otherwise optional.

13.1.2. Defining a Timed Text Source in the Asset Manifest

The following illustrates an example of XML describing a timed text asset in the Asset Manifest. Timed text assets have their own unique asset tag, which includes a locale. When using the Asset Manifest to define a timed text file, the following tags are required: <TimedTextAsset locale="en-US">, <Filename>, <Attribute name="timedText.frameRate">, <Attribute name="timedText.drop">, and <Type>.

```
<TimedTextAsset locale="en-US">
    <Filename>TitanFilms_2589723_US_EnglishCaptions.scc</Filename>
        <Attribute name="timedText.frameRate">29.97</Attribute>
        <Attribute name="timedText.drop">NDF</Attribute>
        <Type>Caption</Type>
        </TimedTextAsset>
```

Supported Attributes

```
<Filename> = String
<Attribute name="timedText.frameRate"> = 23.98, 24, 25, 30, and 29.97.

<Attribute name="timedText.drop"> = DF, NDF

<Type> = Caption, Subtitle
```

13.1.3. Defining an Artwork Source File in the Asset Manifest

When using the Asset Manifest to define a source file for artwork, the following tags are required:

```
<Asset type="artwork" locale="en-US">
<Filename>TitanFilms_2589723_Image.jpg</Filename>
<Attribute name="image.width">1600</Attribute>
<Attribute name="image.height">1200</Attribute>
</Asset>
```

Supported Attributes

```
<Filename> = String
<Attribute name="image.width"> = Integer
<Attribute name="image.height"> = Integer
```

<Asset type="artwork"> and <Filename>.

13.1.4. Example of Use of an Asset Manifest in Place of the File Naming Convention

The following is an example of an Asset Manifest describing a video source, trailer, captions file, and image where all assets delivered do not follow the Amazon Video file naming convention. This example lists only required fields and is for delivery of a title in a single language.

```
<AssetManifest>
<PartnerName>Titan</PartnerName>
<UniqueID>ExplosionsMovie</UniqueID>
<Content type="full">
<Asset type="source" locale="en-US">
 <Filename>TitanFilms 2589723 Feature.mp4</Filename>
</Asset>
<TimedTextAsset locale="en-US">
 <Filename>TitanFilms 2589723 Subtitle.dfxp</Filename>
  <a href="timedText.frameRate">29.97</attribute>
 <a href="timedText.drop">DF</attribute>
 <Type>Subtitle</Type>
  </TimedTextAsset>
 <Asset type="artwork">
<Filename>TitanFilms 2589723 Image.jpg</Filename>
</Asset>
</Content>
<Content type="trailer">
<Asset type="source" locale="en-US">
 <Filename>TitanFilms_2589723_Trailer.mp4</Filename>
  </Asset>
</Content>
</AssetManifest>
```

13.2. File Naming Convention

If you prefer not to deliver assets to Amazon using either the MMC or the Amazon simple asset manifest, then you must follow the file naming convention. This naming convention must be followed exactly. Failure to do so may result in publishing delays or publishing errors.

[PartnerAlias]-[UniqueID]-[ContentType]-[AssetType]-[LanguageCode]-

Example: Titan-ExplosionsMovie-Full-Mezz_HD-en-US.mpg

- The PartnerAlias and UniqueID must exactly match those used in the metadata and avails for that title.
- Each section of the filename is separated by a "-" (hyphen), not an underscore or other punctuation.
- No spaces are allowed in the file names. Underscores "_" can be used to separate words within a single section of the file name, but please be cautious you are not using these incorrectly where a "-" (hyphen) is required instead.
- Metadata files do not need to follow this file naming convention but to help track them for review and
 troubleshooting it is recommended to name them with keywords relating to the provider's organization in
 addition to other identifying info. File naming convention for metadata files should not include spaces,
 Unicode characters, or other special characters. Also, as is the case with timed-text, Amazon supports the
 UTF8 character set with the exception of musical notes.
 - o For example:
 - PartnerAlias-Metadata-Season1.xls
 - PartnerAlias-UniqueID-Title.xml

13.2.1. File Name Sections

Please note: In the examples provided, [] are used to indicate the components and must not be included in the file name. They are only included in these examples to increase legibility.

13.2.1.1. PartnerAlias

[PartnerAlias]-[UniqueID]-[ContentType]-[AssetType]-[LanguageCode]-

- **PartnerAlias**: An Amazon-defined alias used to identify the provider. You will be provided this alias during the onboarding process.
 - This alias is generally an abbreviation of the full partner name. e.g. "Titan Studios" = "Titan."
 - This alias is only used internally and is not customer facing.

13.2.1.2. UniqueID

[PartnerAlias]-[UniqueID]-[ContentType]-[AssetType]-[LanguageCode]-

- UniqueID: Content provider-defined value (a.k.a. SKU) that uniquely defines a title. Every title (Episode, Season, Series, Movie) requires a UniqueID. You may use your own internal tracking number, provided it meets the below requirements:
 - Must be unique within the provider's catalog (i.e. no two titles that provider will send can use the same UniqueID).
 - Must match the Alt ID used in the avails and the Unique ID used in the metadata for the title.
 - No more than 50 characters maximum.
 - Only letters, numbers, and underscores can be used.
 - This UniqueID is used internally only. It is not customer facing.

13.2.1.3. Content Type

[PartnerAlias]-[UniqueID]-[ContentType]-[AssetType]-[LanguageCode]-

- ContentType: Details whether the asset contains the full program material or trailer. The below are valid:
 - o Full: The main program material for the title.
 - o Trailer: Trailer or preview for the title.

13.2.1.4. Asset Type

[PartnerAlias]-[UniqueID]-[ContentType]-[AssetType]-[LanguageCode]-

- AssetType: Describes the type of asset being delivered. The below values are valid:
 - o Mezz UHD: UHD video source file.
 - o Mezz HD: HD video source file.
 - o Mezz SD: SD video source file.
 - o Image: Image file used to promote the title.
 - CaptionXXXX: Closed caption file to support the program. Please note: This value must include
 additional details on the Frame Rate and drop/non-drop value of the caption file. See <u>Section 10 –</u>
 Timed Text for details.
 - SubtitleXXXX: Subtitle file supporting the program. Please note: This value must include additional
 details on the Frame Rate and drop/non-drop value of the subtitle file. See <u>Section 10 Timed Text</u>
 for details.

13.2.1.5. Language Code

[PartnerAlias]-[UniqueID]-[ContentType]-[AssetType]-[LanguageCode]-

- LanguageCode: Describes the language contained on this particular file. This pairs with the "Locale" to form the "Language-Locale" section of the file name. For example:
 - o en-US: "en" is the [LanguageCode] in this pairing. (This pairing would refer to US English.)
 - o **fr**-CA: "fr" is the [LanguageCode] in this pairing. (This pairing would refer to Canadian French.)
 - See Section 20 Appendix VI Language Tags for common supported pairs.

13.2.1.6. Territory

[PartnerAlias]-[UniqueID]-[ContentType]-[AssetType]-[LanguageCode]-

- **Locale**: Describes the region/dialect of the primary language in the [LanguageCode]. This pairs with "LanguageCode" to form the "Language-Locale." For example:
 - o en-**US**: "US" is the [Locale] in this pairing. (This pairing would refer to US English.)
 - o fr-CA: "CA" is the [Locale] in this pairing. (This pairing would refer to Canadian French.)
 - See Section 20 Appendix VI Language Tags for common supported pairs.

13.2.1.7. Other Information (Optional)

[PartnerAlias]-[UniqueID]-[ContentType]-[AssetType]-[LanguageCode]-[Territory]-

- OtherInformation: Any additional information that that needs to be communicated via the file name can be added after the locale. A "-"(hyphen) must be used to separate the [Territory] from these additional details. Examples of how this could be used are:
 - Appending the word "TEST" to a test asset that is being delivered for Onboarding:
 [PartnerAlias]-[UniqueID]-[ContentType]-[AssetType]-[LanguageCode]-[Territory]-TEST.xxx
 - Appending "R1", "R2", "R3", etc. to indicate a new version of a previously delivered asset: [PartnerAlias]-[UniqueID]-[ContentType]-[AssetType]-[LanguageCode]-[Territory]-R1.xxx

13.2.1.8. Extension

Please check the relevant sections in this document for supported extensions / file types for each kind of asset: Metadata, Captions, Subtitles, Images, Video, and Audio.

13.2.2. File Name Examples

The following table provides a series of example file names. The title in this example is being delivered by a provider with the [PartnerAlias] "Titan" for a title with the [UniqueID] of "ExplosionsMovie":

File	Description	ContentType Value	AssetType Value	Locale	Example Filename
Mezzanine	SD mezzanine file for title.	Full	Mezz_SD	Japanese	Titan-ExplosionsMovie-Full-Mezz_SD-ja-JP.mpg
Mezzanine	SD mezzanine file for title.	Full	Mezz_SD	German	Titan-ExplosionsMovie-Full-Mezz_SD-de-DE.mpg
Mezzanine	HD mezzanine file for title.	Full	Mezz_HD	British English	Titan-ExplosionsMovie-Full-Mezz_HD-en-GB.mpg
Mezzanine	HD mezzanine file for title.	Full	Mezz_HD	US English	Titan-ExplosionsMovie-Full-Mezz_HD-en-US.mpg
Mezzanine	SD mezzanine file for trailer.	Trailer	Mezz_SD	Japanese	Titan-Explosions Movie-Trailer-Mezz_SD-ja-JP.mov
Mezzanine	HD mezzanine file for trailer.	Trailer	Mezz_HD	US English	Titan-ExplosionsMovie-Trailer-Mezz_HD-en-US.mov
Image	Main image for the title.	Full	Image	Japanese	Titan-ExplosionsMovie-Full-Image-ja-JP.jpg
Image	Main image for the title.	Full	Image	German	Titan-ExplosionsMovie-Full-Image-de-DE.jpg
Captions	A caption created at 23.98 (23.976) frame rate.	Full	Caption2398NDF	US English	Titan-ExplosionsMovie-Full-Caption2398NDF-en-US.scc
Captions	A caption created at 24 frame rate for a title.	Full	Caption24	German	Titan-ExplosionsMovie-Full-Caption24-de-DE.scc
Subtitle	A subtitle file created at 25 frame rate for a title.	Full	Subtitle25	British English	Titan-ExplosionsMovie-Full-Subtitle25-en-GB.scc
Captions	A caption created at 29.97 drop- frame for a title.	Full	Caption2997DF	US English	Titan-ExplosionsMovie-Full-Caption2997DF-en-US.scc
Subtitle	A subtitle created at 29.97 non- drop frame for a title.	Full	Subtitle2997NDF	US English	Titan-ExplosionsMovie-Full-Subtitle2997NDF-en-US.scc
Mezzanine	HD mezzanine redelivery.	Full	Mezz_HD	British English	Titan-ExplosionsMovie-Full-Mezz_HD-en-GB-R1.mpg

13.3. Ultra-High-Definition

Amazon Video supports the delivery of Ultra-High-Definition (UHD)/4K titles in for Single Track Audio delivery. We do not yet support this for Multi Track Audio titles. The following section outlines spec

requirements for delivering 4K/UHD titles to our service. Please note that you must undergo a specific onboarding process to familiarize yourself with delivering 4K/UHD titles to our platform.

13.3.1. Avails

All 4K/UHD titles must have corresponding avails that include "4K" or "UHD" in the "Format Profile" column. The AltID column for this line must include the Unique ID that is specific to the 4K/UHD version of the title. (See additional details on Unique IDs for UHD titles below.)

13.3.2. Unique IDs for UHD/4K Titles

4K/UHD titles must have their own UniqueID that is different from any HD/SD version of that title. This Unique ID should be the same as the ID for the HD\SD version of the title, but appended with "_UHD" at the end. This will allow Amazon's systems to generate separate detail pages for the 4K/UHD versions of these from their HD/SD counterparts. Please note: For television deliveries only apply the [Ultra HD] title notation on the Series and Season level. Episode level titles should **not** display [Ultra HD] in the title metadata.

US/GB Example:

Туре	Title Metadata	Unique ID
HD/SD	Betas	BetasS1E1
UHD	Betas [Ultra HD]	BetasS1E1_UHD

DE Example:

Туре	Title Metadata	Unique ID
HD/SD	Betas	BetasS1E1
UHD OV	Betas [OV] [Ultra HD]	BetasS1E1_UHD
UHD	Betas [OmU] [Ultra HD]	BetasS1E1_SUB_UHD
Subtitled		
UHD Dubbed	Betas [Ultra HD]	BetasS1E1_DUB_UHD

JP Example:

Туре	Title Metadata	Unique ID
HD/SD	Betas	BetasS1E1
UHD	Betas [4K/Ultra HD]	BetasS1E1_UHD
UHD	Betas (字幕版) [4K/Ultra HD]	BetasS1E1_SUB_UHD
Subtitled		
UHD Dubbed	Betas (吹替版) [4K/Ultra HD]	BetasS1E1_DUB_UHD

13.3.3. Metadata

Separate metadata must be delivered for all UHD/4K titles. Doing this will enable Amazon to create separate detail pages for the UHD versions which include customer facing details that classify them as UHD/4K versions. To facilitate this, please use the below nomenclature when creating metadata for UHD titles:

- The "Unique ID" tag must use an ID that is unique to the UHD version of a title.
 - e.g. <UniqueID>BetasS1E1_UHD</UniqueID>
- The "Title" tag in the metadata must contain the title, followed by "[4K/UHD]".
 - o e.g. <Title>Beta [4K/UHD]</Title>
- If dubbed or subtitled versions are being delivered, the title must also include information identifying the localization type.
 - o e.g. <Title>Beta [OV] [4K/UHD]</Title>
 - o e.g. <Title>Beta [OmU] [4K/UHD]</Title>
- When submitting XML metadata, the "Quality" tag in <Offer> block of the metadata must use the value "UHD" for UHD offers.
 - o e.g. <Quality>UHD</Quality>
- When submitting XLSX metadata, you must fill in the "UHD EST Start", "UHD EST End", "UHD VOD Start", and "UHD VOD End" dates for the title as appropriate. Please ensure that all lines for UHD offers in XLSX metadata use the Unique ID for the UHD version of title.

13.3.4. UHD/4K Mezzanine Specifications

Ultra-High	Format	ProRes, MOV
Definition Video	Display Aspect Ratio	4:3, 1.66:1, 16:9, 1.85:1, 2:1, 2.20:1, 2.35:1, 2.39:1 , 2.40:1
(UHD/ 4K)	Color Space	Rec. 709
	Chroma Subsampling	4:2:2
	Chroma Bit Depth	10-bit
	Progressive Frame Rate	23.976, 24, 25, 29.97, 30, 60

Embedded	Codec	PCM (ipcm)
Audio	Sample Rate	48 kHz
	Bit Depth	16 bit, 24 bit
	Stereo Layout	2-Channel: L-R
	5.1 Surround Sound Layout	6-Channel: L-R-C-LFE-LS-RS
	5.1+Stereo Total Layout	8-Channel: L-R-C-LFE-LS-RS-Lt-Rt

13.3.5. File Name Examples for UHD/4K Titles

File	Description	ContentType Value	AssetType Value	Local	Example Filename
Mezzanine	UHD mezzanine file for title.	Full	Mezz_UHD	US English	Titan-ExplosionsMovie_UHD-Full-Mezz_UHD-en-US.mpg
Mezzanine	UHD mezzanine file for trailer.	Trailer	Mezz_UHD	US English	Titan-ExplosionsMovie_UHD-Trailer-Mezz_UHD-en-US.mov
Mezzanine	UHD mezzanine with dubbed audio.	Full	Mezz_UHD	German Dubbed Audio	Titan-ExplosionsMovie_DUB_UHD-Full-Mezz_UHD-en-US.mpg

Mezzanine	UHD mezzanine with burned-in subtitles.	Full	Mezz_UHD	US English Audio with Localized Subtitles	Titan-ExplosionsMovie_SUB_UHD-Full-Mezz_UHD-en-US.mpg
-----------	---	------	----------	---	---

14. Multi Track Audio (MTA) - Component Source Packages

Multi Track Audio titles are fully component based and defined by the title containing the audio within the mezzanine, as well as discrete (separate) audio files. When delivering MTA component file packages, please defer to the instructions here vs the Single Track Audio Section.

14.1. Elements of a Component Source Package

Amazon Video supports delivery of component source packages for both feature films and TV episodes. This feature provides customers with the option of watching a title with either the original voice (OV) track, or one or more localized dubs of the program content. Customers will also have the option to view timed text in any language made available in their region by the content owner.

14.1.1. Asset Descriptions

The table below provides detail on the assets that make-up a component source package.

Asset	Description
Video Mezzanine	The Video Mezzanine is the asset in the package that contains the video content of the title. Video Mezzanines should also include one embedded language of audio and should be textless or semi-textless, only containing forced subtitles for creative intent. The embedded audio track must be described by a single primary language, and preferably includes both 5.1 and stereo audio whenever available. Technical specifications for the Video Mezzanine (e.g. codec, bit rate, etc.) can be found in Section 11
Alternate Audio	Alternate Audio assets are sources that contain 5.1 and/or stereo dubbed audio localized to a specific language or descriptive audio intended for the blind or visually impaired. Each language must be delivered as a separate, discrete asset conformed to match the accompanying Video Mezzanine. Whenever available, Amazon Video prefers to receive both 5.1 and stereo versions, as a single 8-channel file. Please see Section 14.2 for technical specifications.
Forced Subtitles	Forced Subtitles (also known as Forced Narratives) are timed text assets that translate on-screen text or foreign dialogue that is in a language other than the main audio content of the feature. Forced Subtitles are displayed by default and cannot be turned off by the viewer. The language of the Forced Subtitles displayed to the viewer will match the audio language the customer is viewing the content in. Please see Section 10 for technical specifications.

Full Subtitles	Full Subtitles are timed text assets that provide transcription of all dialogue for a title. Full Subtitles must also include all content included in the Forced Narrative for that title. Subtitles can be turned on and off by customers. Whenever available, Amazon Video strongly prefers to receive SDH (Subtitles for the Deaf and Hard of Hearing) Subtitles which include atmospherics. This will allow Amazon to provide a higher-quality viewing experience for customers who are deaf or hard of hearing. Please see Section 10 for technical specifications.
Dub Cards	Dub Cards are assets that list voice actors who have played major roles in the localized voice acting for a title. Amazon Video accepts discrete video files as sources for Dub Cards. Please see Section 14.5 for technical specifications.
Images	Images are the keyart displayed on product detail pages and in search results. Amazon currently supports localized images in US, UK, DE, and JP marketplaces. All other regions require a single image. Amazon prefers either the OV or the English version of the image. Please see Section 9 for image specifications and editorial guidelines.

14.2. Media Manifest Core (MMC)

Providers delivering component source packages to Amazon Video must include a Delivery Manifest. In order to align with industry standards, Amazon supports the Media Manifest Delivery Core (MMC). The MMC is an industry standard XML schema designed by MovieLabs in collaboration with the Entertainment Merchants Association. Documentation on this specification and example files can be found on the MovieLabs website. All component packages delivered to Amazon Video must be accompanied by a delivery manifest in this format.

Amazon Video supports the following features of the MMC: Inventory, Presentations, Playable Sequences, and Experiences. The model for how these features work together is illustrated in Figure 1 below.