



CHAPTER 4

Creating Job Profiles (CLUI)

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Job Profiles are templates that define how Cisco MXE 3000 processes jobs.

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Introduction to Job Profiles

The power of the Cisco MXE 3000 lies in its ability to automate the streaming media workflow and to reuse the video knowledge of others in the form of a saved set of tasks and instructions called Job Profiles.

Job Profiles are essentially templates that define how jobs are processed. Saved profiles can contain part or all of the settings required to process jobs from beginning to final distribution. Job Profiles can be optimized for different types of input media, encoding output, and distribution. Job Profiles can be stored in a location accessible to all users, or can be saved to individual locations.

See also: [Editing an Existing Job Profile](#) for a list of prepackaged Job Profiles.



Note

To submit a job using the CLUI, the new job must be saved as a Job Profile, or a Job Profile must be associated with the new job.

Definitions:

- **Encoding Task:** A sub-operation or unit of work that is an element of a Cisco MXE 3000 Job Profile. A collection of encoding tasks comprises an Job Profile. (e.g. preprocessor, H.264 encoding, notification tasks, etc.)

- **Job Profile:** A collection of encoding tasks situated in such a way as to transform input content files into one or more output content files. For example, a Job Profile configured to transform MPEG2 content into Flash 8 and Real, then report to Velocity, would consist of the following:
 - Preprocessor task
 - Flash 8 encoding task
 - Real encoding task
 - Notification task (sent on completion or failure)

Why Create a Job Profile?

A Job Profile is a template encapsulating all the operations that are applied to a media file, including preprocessing, encoding, distribution, and notification.

What Must Go in a Job Profile?

At a minimum a Job Profiles consists of a preprocessor and one encoder.

What Can Go in a Job Profile?

In addition, a Job Profile may contain the following:

- Multiple encoders generating multiple output files
- Distribution settings that copy or FTP the output media
- Notification settings that notify operators or other downstream systems of the failure or completion of a transcoded job

Job Profile File Extension

Job Profiles and profile components both have an .awp extension.

Standard Cisco MXE 3000 Job Profiles

The Cisco MXE 3000 offers the following Job Profiles that come preinstalled. The new profiles are aligned with modern distribution devices, such as HiWire, iPod, iTunes, Joost, Windows Media and many more.

See also: [Using a Job Profile to Submit a Job](#) to view or use these Job Profiles or [Editing an Existing Job Profile](#) to modify.



Caution

We strongly recommend that you use the preconfigured Job Profiles and change settings only if you understand the consequences. Modifying preconfigured Job Profile settings or creating new Job Profiles with settings that media standards do not support can result in job processing failures or produce undesirable output.

- 3GPP QCIF
- 3GPP QCIF H263 AAC
- 3GPP QVGA
- 3GPP SubQCIF H263 AAC
- AVC_ATT_SD_VOD
- AVC_PC_TV
- Blackberry 81xx WMV 16X9
- Blackberry 88xx and 81xx WMV 4x3
- Blackberry 88xx WMV 16x9
- Brightcove
- Cable_Broadband
- CableLabs HD
- CableLabs SD
- Comcast_Fancast
- Digital Master
- DMP 4300
- DMP 4400
- FLV 240x120 Low Wide
- FLV 240x180 Low
- FLV 320x160 Mid Wide
- FLV 320x240 Mid
- FLV 400x200 High Wide
- FLV 400x300 High
- FLV 400x300
- Google_Broadband
- H.264 400x300
- H.264 720p 8Mbps AC3
- H.264 720p Flash MP4
- H.264 1080i 10Mbps AC3
- H.264 1080p 13Mbps AC3
- H.264 1080p Flash MP4
- HD_WMV_720p
- HiWire
- iPhone
- iPhone_Cellular
- iPhone_Storage
- iPhone_Wide
- iPod Wide

- iPod
- iPod_Podcast
- iTunes_Film
- iTunes_Video
- Joost
- PSP_16x9
- PSP_4x3
- Veoh
- WM 240x120 Low Wide
- WM 240x180 Low
- WM 320x160 Mid Wide
- WM 320x240 Mid
- WM 400x200 High Wide
- WM 400x300 High
- WM 400x300
- WM CIF
- WM QCIF

3GPP QCIF

Creates output playable on 3GPP compliant handsets (mobile phones). Uses the QT Encoder for producing the designated output (MPEG-4). Some handsets may support different frame sizes and frame rates.

Profile Components

```
<preprocessor>3GPP QCIF.3GPP QCIF.pp.awp</preprocessor>
<quicktime>3GPP QCIF.3GPP QCIF.qt.awp</quicktime>>
```

Output File Characteristics

176 x 144 @ 15fps / 3GPP Format MPEG-4 / QuickTime

Modification Suggestions

For PAL sources, change the frame rate to 12.5.

3GPP QCIF H263 AAC

Creates output playable on 3GPP compliant handsets (mobile phones). Uses the QT Encoder for producing the designated output. Some handsets may support different frame sizes and frame rates.

Profile Components

```
<preprocessor>3GPP QCIF H263 AAC.3GPP QCIF H263 AC.pp.awp</preprocessor>
<quicktime>3GPP QCIF H263 AAC.3GPP QCIF H263 AAC.qt.awp</quicktime>
```

Output File Characteristics

176 x 144 @ 15fps / 3GPP Format H.263 / QuickTime

Modification Suggestions

For PAL sources, change the frame rate to 12.5.

3GPP QVGA

Creates output playable on 3GPP compliant handsets (mobile phones). Uses the QT Encoder for producing the designated output. Some handsets may support different frame sizes and frame rates.

Profile Components

```
<preprocessor>3GPP QVGA.3GPP QVGA.pp.awp</preprocessor>
```

```
<quicktime>3GPP QVGA.3GPP QVGA.qt.awp</quicktime>
```

Output File Characteristics

320 x 240 @ 15fps / 3GPP Format H.264 / QuickTime

Modification Suggestions

For PAL sources, change the frame rate to 12.5.

3GPP SubQCIFF H263 AAC

Creates content for cell phones with data connection speeds as low as 40 kbps.

Profile Components

```
<preprocessor>3GPP SubQCIFF H263 AAC.3GPP SubQCIFF H263 AAC.pp.awp</preprocessor>
```

```
<quicktime>3GPP SubQCIFF H263 AAC.3GPP SubQCIFF H263 AAC.qt.awp</quicktime>
```

Output File Characteristics

H.263 video 32 kbits/second 128x96 10 fps with AAC-LC audio with 8 kbps @ 8 kHz mono in a 3GPP wrapper

AVC_ATT_SD_VOD

AVC (H.264) output using the Mainconcepts H.264 codec. Designed to produce Standard Definition VOD files per the AT&T specification for OnDemand playback on Cable Set Top Boxes (STB's).

Profile Components

```
<H264>AVC_ATT_SD_VOD.AVC_ATT_SD_VOD.H264.awp</H264>
```

```
<preprocessor>AVC_ATT_SD_VOD.AVC_ATT_SD_VOD.pp.awp</preprocessor>
```

Output File Characteristics

528 x 480 (progressive) @ 29.97fps H.264 file / 1900 kbps CableLabs transport stream

AVC_PC_TV

AVC (H.264) SD VOD output designed to PC TV specification. Uses Mainconcepts H.264 codec.

Profile Components

```
<H264>AVC_PC_TV.AVC_PC_TV.H264.awp</H264>  
<preprocessor>AVC_PC_TV.AVC_PC_TV.pp.awp</preprocessor>
```

Output File Characteristics

640 x 480 (progressive) @ 29.97fps /2000 kpbs CableLabs transport stream

Blackberry 81xx WMV 16X9

Creates output designed to playback on a Blackberry 81xx compliant mobile phone with a widescreen aspect ratio. These parameters should not be modified unless updated specifications are provided by Research In Motion (RIM).

Profile Components

```
<microsoft>Blackberry 81xx WMV 16x9.Blackberry 81xx WMV 16x9.ms.awp</microsoft>  
<preprocessor>Blackberry 81xx WMV 16x9.Blackberry 81xx WMV 16x9.pp.awp</preprocessor>
```

Output File Characteristics

240 x 134 @ 24fps (wide) / Windows Media Format 9

Blackberry 88xx and 81xx WMV 4x3

Creates output designed to play back on Blackberry 81xx and 88xx model mobile phone with a 4x3 aspect ratio. These parameters should not be modified unless updated specifications are provided by Research In Motion (RIM).

Profile Components

```
<microsoft>Blackberry 88xx and 81xx WMV 4x3.Blackberry 88xx and 81xx WMV  
4x3.ms.awp</microsoft>  
<preprocessor>Blackberry 88xx and 81xx WMV 4x3.Blackberry 88xx and 81xx WMV  
4x3.pp.awp</preprocessor>
```

Output File Characteristics

240 x 180 @ 24fps (wide) / Windows Media Format 9

Blackberry 88xx WMV 16x9

Creates output designed to play back on a Blackberry 88xx compliant mobile phone with a widescreen aspect ratio. These parameters should not be modified unless updated specifications are provided by Research In Motion (RIM).

Profile Components

```
<microsoft>Blackberry 88xx WMV 16x9.Blackberry 88xx WMV 16x9.ms.awp</microsoft>  
<preprocessor>Blackberry 88xx WMV 16x9.Blackberry 88xx WMV 16x9.pp.awp</preprocessor>
```

Output File Characteristics

320 x 180 @ 24fps (wide) / Windows Media Format 9

Brightcove

Flash (VP6) encoding based on published specification from Brightcove.

Profile Components

```
<flash8>Brightcove.flash8.awp</flash8>
```

```
<preprocessor>Brightcove.pp.awp</preprocessor>
```

Output File Characteristics

480 x 360 Flash8 VP6 FLV @ 30fps / 450kbps

Cable_Broadband

Windows Media output designed for production environments delivering high quality WM9 content for Broadband service providers.

Profile Components

```
<microsoft>Cable_Broadband.Cable_Broadband.ms.awp</microsoft>
```

```
<preprocessor>Cable_Broadband.Cable_Broadband.pp.awp</preprocessor>
```

Output File Characteristics

320 x 240 WM9 @ 30fps / 500kbps

CableLabs HD

Creates an MPEG-2 transport stream for High Definition (1920 x 1080) VOD Cable Distribution in North America using the CinemaCraft High Quality MPEG-2 Codec and multiplexer. Is capable of AC3 (5.1 or stereo) audio encoding. These settings comply with CableLabs specification and should not be modified.

Profile Components

```
<mpeg>CableLabs HD.CableLabs HD.mpeg.awp</mpeg>
```

```
<preprocessor>CableLabs HD.CableLabs HD.pp.awp</preprocessor>
```

Output File Characteristics

1920 x 1080 (interlaced) @ 29.97fps / 15Mbps MPEG-2 transport stream / AC3 Stereo Audio

CableLabs SD

Creates an MPEG-2 transport stream for Standard Definition VOD Cable Distribution using the CinemaCraft High Quality MPEG-2 Codec and multiplexer. Is capable of AC3 (5.1 or stereo) audio encoding. These settings comply with CableLabs specification and should not be modified.

Profile Components

```
<mpeg>CableLabs SD.CableLabs SD.mpeg.awp</mpeg>
```

```
<preprocessor>CableLabs SD.CableLabs SD.pp.awp</preprocessor>
```

Output File Characteristics

528 x 480 (interlaced) @ 29.97fps /3180 kbps MPEG-2 transport stream / AC3 Stereo Audio

Comcast_Fancast

Creates a Flash SWF format file compliant with the Comcast Fancast Broadband network.

Profile Components

```
<flash8>Comcast_Fancast.flash8.awp</flash8>
```

```
<preprocessor>Comcast_Fancast.pp.awp</preprocessor>
```

Output File Characteristics

640 x 480 Flash SWF (VP6) @ 30fps / 700Kbps

Digital Master

Creates an MPEG-2 file that is appropriate for archiving. It is a 50 Mbps I-Frame only MPEG-2 file with a program stream wrapper.

Profile Components

```
<mpeg>Digital Master.Digital Master.mpeg.awp</mpeg>
```

```
<output>Digital Master.Digital Master.out.awp</output>
```

```
<preprocessor>Digital Master.Digital Master.pp.awp</preprocessor>
```

Output File Characteristics

Video MPEG-2 at 50 mpbs I Frame only (no temporal compression) NTSC video frame size 720x480 @29.97 4:2:2 chroma format interlaced

Audio: Layer 2 Stereo at 384 kbps 2 48 kHz

MPEG-2 Program Stream Wrapper

Modification Suggestions

For PAL content, change frame size to 720x576 and frame rate 25 fps.

DMP 4300

This Digital Media Profile creates content that can be played on the Cisco DMP 4300.

Profile Components

```
<mpeg>DMP 4300.DMP 4300.mpeg.awp</mpeg>
```

```
<preprocessor>DMP 4300.DMP 4300.pp.awp</preprocessor>
```

Output File Characteristics

Creates video MPEG2 video progressive frame size 1368x768 at 30 frames per second. The bit rate is 5568 kbps and the pixel aspect ratio is 1:1 (Square)

Audio: Layer 2 stereo 192 kbps @ 48 kHz.

MPEG-2 transport stream wrapper

DMP 4400

This Digital Media Profile creates content that can be played on the Cisco DMP 4400.

Profile Components

```
<H264>DMP 4400.H264.awp</H264>
```

```
<preprocessor>DMP 4400.pp.awp</preprocessor>
```

Output File Characteristics

Video H.264 video progressive frame size 1368x768 at 30 frames per second. The bit rate is 3000 kbps.

Audio: AAC stereo 128 kbps @ 44.1 kHz.

MPEG-2 transport stream wrapper

FLV 240x120 Low Wide

Creates a "low bitrate" On2 Flash8 VP6 codec FLV file for web distribution in the Adobe Flash Player. The Flash FLV file will be widescreen format. Common adjustments are to bitrate where increasing bitrate adds to file size, but creates higher quality output. Other modifications include adjusting frame size and frame rate. Frame size and frame rate adjustments can affect video quality, with higher frame rates and sizes without an increased bitrate, which might negatively impact picture quality.

Profile Components

```
<flash8>FLV 240x120 Low Wide.FLV 240x120 Low Wide.flash8.awp</flash8>
```

```
<preprocessor>FLV 240x120 Low Wide.FLV 240x120 Low Wide.pp.awp</preprocessor>
```

Output File Characteristics

240 x 120 @ 15fps / 100kbps / On2 VP6 Codec (Flash8) / FLV format / MP3 Audio

Modification Suggestions

- For PAL sources, change the frame rate to 12.5.
- Consider changing encode mode to 2 pass VBR. The encoding will take longer, but the video quality will be improved. Variable bitrates can cause buffering when connections to the streaming server are equal to the bitrate.

FLV 240x180 Low

Creates a "low bitrate" On2 Flash8 VP6 codec FLV file for web distribution in the Adobe Flash Player. Common adjustments are to bitrate where increasing bitrate adds to filesize, but creates higher quality output. Other modifications include adjusting frame size and frame rate. Frame size and frame rate adjustments can affect video quality, with higher frame rates and sizes without an increased bitrate, which might negatively impact picture quality.

Profile Components

```
<flash8>FLV 240x180 Low.FLV 240x180 Low.flash8.awp</flash8>
```

```
<preprocessor>FLV 240x180 Low.FLV 240x180 Low.pp.awp</preprocessor>
```

Output File Characteristics

240 x 180 @ 15fps / 100Kbps / On2 VP6 Codec (Flash8) / FLV format / MP3 Audio

Modification Suggestions

- For PAL sources, change the frame rate to 12.5.
- Consider changing encode mode to 2 pass VBR. The encoding will take longer, but the video quality will be improved. Variable bitrates can cause buffering when connections to the streaming server are equal to the bitrate.

FLV 320x160 Mid Wide

Creates a "medium bitrate" On2 Flash8 VP6 codec FLV file for web distribution in the Adobe Flash Player. The output will be widescreen format. Common adjustments are to bitrate where increasing bitrate adds to filesize, but creates higher quality output. Other modifications include adjusting frame size and frame rate. Frame size and frame rate adjustments can affect video quality, with higher frame rates and sizes without an increased bitrate, which might negatively impact picture quality.

Profile Components

```
<flash8>FLV 320x160 Mid Wide.FLV 320x160 Mid Wide.flash8.awp</flash8>
```

```
<preprocessor>FLV 320x160 Mid Wide.FLV 320x160 Mid Wide.pp.awp</preprocessor>
```

Output File Characteristics

320 x 160 @ 15fps / 250kbps / On2 VP6 Codec (Flash8) / FLV format / MP3 Audio

Modification Suggestions

- For PAL sources, change the frame rate to 12.5.
- For smoother motion video, increase the frame rate:
 - For PAL sources, change the frame rate to 25.
 - For NTSC sources, change the frame rate to 29.97.
- Consider changing encode mode to 2 pass VBR. The encoding will take longer, but the video quality will be improved. Variable bitrates can cause buffering when connections to the streaming server are equal to the bitrate.

FLV 320x240 Mid

Creates a "medium bitrate" On2 Flash8 VP6 codec FLV file for web distribution in the Adobe Flash Player. Common adjustments are to bitrate where increasing bitrate adds to filesize, but creates higher quality output. Other modifications include adjusting frame size and frame rate. Frame size and frame rate adjustments can affect video quality, with higher frame rates and sizes without an increased bitrate, which might negatively impact picture quality.

Profile Components

```
<flash8>FLV 320x240 Mid.FLV 320x240 Mid.flash8.awp</flash8>
```

```
<preprocessor>FLV 320x240 Mid.FLV 320x240 Mid.pp.awp</preprocessor>
```

Output File Characteristics

320 x 240 @ 15fps / 250kbps / On2 VP6 Codec (Flash8) / FLV format / MP3 Audio

Modification Suggestions

- For PAL sources, change the frame rate to 12.5.
- For smoother motion video, increase the frame rate:

- For PAL sources, change the frame rate to 25.
- For NTSC sources, change the frame rate to 29.97.
- Consider changing encode mode to 2 pass VBR. The encoding will take longer, but the video quality will be improved. Variable bitrates can cause buffering when connections to the streaming server are equal to the bitrate.

FLV 400x200 High Wide

Creates a "high bitrate" On2 Flash8 VP6 codec FLV file for web distribution in the Adobe Flash Player. The output will be widescreen format. Common adjustments are to bitrate where increasing bitrate adds to filesize, but creates higher quality output. Other modifications include adjusting frame size and frame rate. Frame size and frame rate adjustments can affect video quality, with higher frame rates and sizes without an increased bitrate, which might negatively impact picture quality.

Profile Components

```
<flash8>FLV 400x200 High Wide.FLV 400x200 High Wide.flash8.awp</flash8>
```

```
<preprocessor>FLV 400x200 High Wide.FLV 400x200 High Wide.pp.awp</preprocessor>
```

Output File Characteristics

400 x 200 @ 30fps / 400kbps / On2 VP6 Codec (Flash8) / FLV format / MP3 Audio

Modification Suggestions

- For PAL sources, change the frame rate to 12.5.
- For smoother motion video, increase the frame rate:
 - For PAL sources, change the frame rate to 25.
 - For NTSC sources, change the frame rate to 29.97.

FLV 400x300 High

Creates a "high bitrate" On2 Flash8 VP6 codec FLV file for web distribution in the Adobe Flash Player. Common adjustments are to bitrate where increasing bitrate adds to filesize, but creates higher quality output. Other modifications include adjusting frame size and frame rate. Frame size and frame rate adjustments can affect video quality, with higher frame rates and sizes without an increased bitrate, which might negatively impact picture quality.

Profile Components

```
<flash8>FLV 400x300 High.FLV 400x300 High.flash8.awp</flash8>
```

```
<preprocessor>FLV 400x300 High.FLV 400x300 High.pp.awp</preprocessor>
```

Output File Characteristics

400 x 300 @ 30fps / 400kbps / On2 VP6 Codec (Flash8) / FLV format / MP3 Audio

Modification Suggestions

- For PAL sources, change the frame rate to 25.
- For NTSC sources change the frame rate to 29.97.
- Consider changing encode mode to 2 pass VBR. The encoding will take longer, but the video quality will be improved. Variable bitrates can cause buffering when connections to the streaming server are equal to the bitrate.

FLV 400x300

Creates a Flash file with a 4x3 aspect ratio appropriate for broadband connection speeds faster than 450 kbps. The frame rate is 30 fps, which is appropriate for NTSC sources.

Profile Components

```
<flash8>FLV 400x300.FLV 400x300.flash8.awp</flash8>
<preprocessor>FLV 400x300.FLV 400x300.pp.awp</preprocessor>
```

Output File Characteristics

Creates an On2 VP6 (Flash 8) FLV file with a frame size of 400x300 at 400 kbps and MP3 audio at 48 kbps at 44.1 kHz mono

Modification Suggestions

For PAL sources, change the frame rate to 25 fps.

Google_Broadband

Creates a high-quality H.264 (mp4) file for delivery as a mezzanine format to Google Broadband network.

Profile Components

```
<H264>Google_Broadband.H264.awp</H264>
<preprocessor>Google_Broadband.pp.awp</preprocessor>
```

Output File Characteristics

640 x 480 H.264 @ 30fps / 2Mbps

H.264 400x300

Creates an H.264 file @ 600kbps in an MP4 wrapper. Designed for playback in the Adobe Flash Media Player for broadband distribution. Adjustments can be made to the frame size and bitrate.

Profile Components

```
<H264>H.264 400x300.H264.awp</H264>
<preprocessor>H.264 400x300.pp.awp</preprocessor>
```

Output File Characteristics

400 x 300 @ 30fps / H.264 (mp4) / 600kbps

Modification Suggestions

For PAL sources, change the frame rate to 25.

H.264 720p 8Mbps AC3

Creates an H.264 file @ 8Mbps in an MPEG-2 transport stream. Typically, this will be used for distribution to an IPTV network for VOD consumption. The content is progressive for display on 720p television sets. This will create a large HD output file with high picture quality. Adjustments can be made to frame size (currently 1280x720) and bitrate (currently 7760 kbps).

Profile Components

```
<H264>H.264 720p 8Mbps AC3.H.H.H.H.264 720p 8Mbps AC3.H264.awp</H264>
```

```
<preprocessor>H.264 720p 8Mbps AC3.H.H.H.H.264 720p 8Mbps AC3.pp.awp</preprocessor>
```

Output File Characteristics

1280 x 720 @ (progressive) 30fps / H.264 transport stream

H.264 720p Flash MP4

Creates an H.264 file @ 8Mbps in an MPEG-4 wrapper. Typically, this will be used for distribution to an IPTV network for VOD consumption. The content is progressive for display on 720p television sets. This will create a large HD output file with high picture quality. Adjustments can be made to frame size (currently 1280x720) and bitrate (currently 3800 kbps).

Profile Components

```
<H264>H.264 720p Flash MP4.H.264 720p Flash MP4.H264.awp</H264>
```

```
<preprocessor>H.264 720p Flash MP4.H.264 720p Flash MP4.pp.awp</preprocessor>
```

Output File Characteristics

1280 x 720 @ (progressive) 30fps / H.264 (mp4)

Modification Suggestions

For PAL sources, change the frame rate to 25.

H.264 1080i 10Mbps AC3

Creates an H.264 file @ 10Mbps in an MPEG-2 transport stream. Typically, this will be used for distribution to an IPTV network for VOD consumption. The content is interlaced for display on 1080i television sets. This will create a large HD output file with high picture quality. Adjustments can be made to frame size (currently 1920 x 1080) and bitrate (currently 10Mbps).

Profile Components

```
<H264>H.264 1080i 10Mbps AC3.H.264 1080i 10Mbps AC3.H264.awp</H264>
```

```
<preprocessor>H.264 1080i 10Mbps AC3.H.264 1080i 10Mbps AC3.pp.awp</preprocessor>
```

Output File Characteristics

1920 x 1080 (interlaced) @ 30fps / H.264 transport stream

Modification Suggestions

- For PAL sources, change the frame rate to 25.
- For NTSC sources, change the frame rate to 29.97.

H.264 1080p 13Mbps AC3

Creates an H.264 file @ 13Mbps in an MPEG-2 transport stream. Typically, this will be used for distribution to an IPTV network for VOD consumption. The content is progressive for display on 1080p television sets. This will create a large HD output file with high picture quality. Adjustments can be made to frame size (currently 1920 x 1080) and bitrate (currently 13Mbps).

Profile Components

```
<H264>H.264 720p 8Mbps AC3.H.H.H.H.264 1080p 13Mbps AC3.H264.awp</H264>
```

```
<preprocessor>H.264 720p 8Mbps AC3.H.H.H.H.264 1080p 13Mbps AC3.pp.awp</preprocessor>
```

Output File Characteristics

1920 x 1080 @ (progressive) 30fps / H.264 transport stream

Modification Suggestions

- For PAL sources, change the frame rate to 25.
- For NTSC sources, change the frame rate to 29.97.

H.264 1080p Flash MP4

Creates an H.264 file @ 7Mbps in an MP4 wrapper. Typically, this will be used for distribution to an Internet Movie Site for VOD consumption. The content is MP4, and designed for playout in the Adobe Flash Media Player. This will create a large HD output file with high picture quality. Adjustments can be made to frame size (currently 1920 x 1080) and bitrate (currently 6500 kbps).

Profile Components

```
<H264>H.264 1080p Flash MP4.H.264 1080p Flash MP4.H264.awp</H264>
```

```
<preprocessor>H.264 1080p Flash MP4.H.264 1080p Flash MP4.pp.awp</preprocessor>
```

Output File Characteristics

1920 x 1080 @ (progressive) 30fps / H.264 (MP4)

Modification Suggestions

- For PAL sources, change the frame rate to 25.
- For NTSC sources, change the frame rate to 29.97.

HD_WMV_720p

Creates a high-quality VC1 (Windows Media advanced profile) output file with a resolution of 720p. Used primarily for VC1 applications and some broadband distribution.

Profile Components

```
<microsoft>HD_WMV_720p.HD_WMV_720p.ms.awp</microsoft>
```

```
<preprocessor>HD_WMV_720p.HD_WMV_720p.pp.awp</preprocessor>
```

Output File Characteristics

1280 x 720 (progressive) Windows Media VC1 @ 30fps / 3.5Mbps

HiWire

Creates a high-quality SD MPEG-2 program stream for delivery as a mezzanine format to the HiWire CDN Network.

Profile Components

```
<mpeg>HiWire.mpeg.awp</mpeg>
```

```
<preprocessor>HiWire.pp.awp</preprocessor>
```

Output File Characteristics

704 x 480 (interlaced) @ 29.97fps / 6Mbps

iPhone

Creates iPhone compliant MPEG-4 output. This should be used for standard 4:3 content (480x320). Adjustments should not be made to this profile.

Profile Components

```
<preprocessor>iPhone.iPhone.pp.awp</preprocessor>
```

```
<quicktime>iPhone.iPhone.qt.awp</quicktime>
```

Output File Characteristics

480 x 320 @ 15fps / QuickTime wrapped MPEG-4

Modification Suggestions

- For PAL sources, change the frame rate to 12.5.
- For smoother motion video increase the frame rate:
 - For PAL sources, change the frame rate to 25.
 - For NTSC sources, change the frame rate to 29.97.

iPhone_Cellular

Creates an H.264 3GPP file format compliant with streaming cellular networks and optimized for the Apple iPhone.

Profile Components

```
<preprocessor>iPhone-Cellular.pp.awp</preprocessor>
```

```
<quicktime>iPhone-Cellular.qt.awp</quicktime>
```

Output File Characteristics

176 x 116 3GPP file @ 15fps

iPhone_Storage

Creates an H.264 iPhone-compliant MPEG-4 output file for playing download and local playout on an Apple iPhone.

Profile Components

```
<preprocessor>iPhone-Storage.pp.awp</preprocessor>
```

```
<quicktime>iPhone-Storage.qt.awp</quicktime>
```

Output File Characteristics

480 x 320 m4v (MPEG-4) @ 30fps

iPhone_Wide

Creates iPhone-compliant MPEG-4 output. This should be used for widescreen content (480x214).

Profile Components

```
<preprocessor>iphone wide.iphone wide.pp.awp</preprocessor>
```

```
<quicktime>iphone wide.iphone wide.qt.awp</quicktime>
```

Output File Characteristics

320 x 180 @ 15fps / QuickTime wrapped MPEG-4

Modification Suggestions

- For PAL sources, change the frame rate to 12.5.
- To adjust video aspect ratio, change the frame size to 480 x 270.
- For smoother motion video, increase the frame rate:
 - For PAL sources, change the frame rate to 25.
 - For NTSC sources, change the frame rate to 29.97.
- Change the frame size to 480 x 270

iPod Wide

Creates an H.264 m4v (mp4) file for playing download and local playout on an Apple iPod. Typically used when hosting video podcasts (widescreen format) for broadband websites.

Profile Components

```
<preprocessor>iPod Wide.iPod Wide.pp.awp</preprocessor>
```

```
<quicktime>iPod Wide.iPod Wide.qt.awp</quicktime>
```

Output File Characteristics

320 x 180 m4v (mp4) @ 15fps

Modification Suggestions

- For PAL sources, change the frame rate to 12.5,
- For smoother motion video, increase the frame rate:
 - For PAL sources, change the frame rate to 25.
 - For NTSC sources, change the frame rate to 29.97.

iPod

Creates an H.264 m4v (mp4) file for playing download and local playout on an Apple iPod. Typically used when hosting video podcasts for broadband websites.

Profile Components

```
<preprocessor>iPod.iPod.pp.awp</preprocessor>
```

```
<quicktime>iPod.iPod.qt.awp</quicktime>
```

Output File Characteristics

320 x 240 m4v (mp4) @ 15fps

Modification Suggestions

- For PAL sources, change the frame rate to 12.5.
- For smoother motion video, increase the frame rate:
 - For PAL sources, change the frame rate to 25.
 - For NTSC sources, change the frame rate to 29.97.

iPod_Podcast

Creates an H.264 M4V (MP4) file for playing download and local payout on an Apple iPod. Typically used when hosting video podcasts for broadband websites.

Profile Components

```
<preprocessor>iPod Podcast.pp.awp</preprocessor>
```

```
<quicktime>iPod Podcast.qt.awp</quicktime>
```

Output File Characteristics

320 x 240 m4v (mp4) @ 30fps

iTunes_Film

Creates a high-quality SD MPEG-2 program stream mezzanine format for delivery to the Apple iTunes Music Store. Optimized for film-based content.

Profile Components

```
<mpeg>iTunes-Film.mpeg.awp</mpeg>
```

```
<preprocessor>iTunes-Film.pp.awp</preprocessor>
```

Output File Characteristics

640 x 480 (progressive) @ 24fps / 15Mbps MPEG-2 program stream

iTunes_Video

Creates a high-quality SD MPEG-2 program stream mezzanine format for delivery to the Apple iTunes Music Store. Optimized for video-based content.

Profile Components

```
<mpeg>iTunes-Video.mpeg.awp</mpeg>
```

```
<preprocessor>iTunes-Video.pp.awp</preprocessor>
```

Output File Characteristics

640 x 480 (progressive) @ 29.97fps / 15Mbps MPEG-2 program stream

Joost

Creates a high-quality SD MPEG-2 program stream mezzanine format for delivery to the Joost Mobile network.

Profile Components

<mpeg>Joost.mpeg.awp</mpeg>

<preprocessor>Joost.pp.awp</preprocessor>

Output File Characteristics

720 x 480 (interlaced) @ 29.97fps / 6Mbps MPEG-2 program stream

PSP_16x9

Creates an H.264 file intended for play on the Sony PSP portable gaming system. Optimized for 16 x 9 format content.

Profile Components

<H264>PSP-16x9.H264.awp</H264>

<preprocessor>PSP-16x9.pp.awp</preprocessor>

Output File Characteristics

368 x 208 @ 29.97fps / 780Kbps MPEG-1 format

PSP_4x3

Creates an H.264 file intended for play on the Sony PSP portable gaming system. Optimized for 4 x 3 format content.

Profile Components

<H264>PSP-4x3job.awp.H264.awp</H264>

<preprocessor>PSP-4x3job.awp.pp.awp</preprocessor>

Output File Characteristics

320 x 240 @ 29.97fps / 780Kbps MPEG-1 format

Veoh

Creates a broadband Windows Media file for delivery to the Veoh Network.

Profile Components

<microsoft>Veoh.ms.awp</microsoft>

<preprocessor>Veoh.pp.awp</preprocessor>

Output File Characteristics

640 x 480 @ 29.97fps / 1500 kbps Windows Media file format

WM 240x120 Low Wide

Creates a "low bitrate" Windows Media file for web distribution. The Windows Media file will be widescreen format. Common adjustments are to bitrate where increasing bitrate adds to filesize, but creates higher quality output. Other modifications include adjusting frame size and frame rate. Frame size and frame rate adjustments can affect video quality. Higher frame rates and sizes without an increased bitrate might negatively impact picture quality.

Profile Components

```
<microsoft>WM 240x120 Low Wide.WM 240x120 Low Wide.ms.awp</microsoft>
```

```
<preprocessor>WM 240x120 Low Wide.WM 240x120 Low Wide.pp.awp</preprocessor>
```

Output File Characteristics

240 x 120 @ 15fps / 120kbps / WMV

Modification Suggestions

- For PAL sources, change the frame rate to 12.5.
- Consider changing encode mode to 2 pass VBR. The encoding will take longer, but the video quality will be improved. Variable bitrates can cause buffering when connections to the streaming server are equal to the bitrate.

WM 240x180 Low

Creates a "low bitrate" Windows Media file for web distribution. Common adjustments are to bitrate where increasing bitrate adds to filesize, but creates higher quality output. Other modifications include adjusting frame size and frame rate. Frame size and frame rate adjustments can affect video quality. Higher frame rates and sizes without an increased bitrate might negatively impact picture quality.

Profile Components

```
<microsoft>WM 240x180 Low.WM 240x180 Low.ms.awp</microsoft>
```

```
<preprocessor>WM 240x180 Low.WM 240x180 Low.pp.awp</preprocessor>
```

Output File Characteristics

240 x 180 @ 15fps / 120kbps / WMV

Modification Suggestions

- For PAL sources, change the frame rate to 12.5.
- Consider changing encode mode to 2 pass VBR. The encoding will take longer, but the video quality will be improved. Variable bitrates can cause buffering when connections to the streaming server are equal to the bitrate.

WM 320x160 Mid Wide

Creates a "medium bitrate" Windows Media file for web distribution. The Windows Media file will be widescreen format. Common adjustments are to bitrate where increasing bitrate adds to filesize, but creates higher quality output. Other modifications include adjusting frame size and frame rate. Frame size and frame rate adjustments can affect video quality. Higher frame rates and sizes without an increased bitrate might negatively impact picture quality.

Profile Components

```
<microsoft>WM 320x160 Mid Wide.WM 320x160 Mid Wide.ms.awp</microsoft>
<preprocessor>WM 320x160 Mid Wide.WM 320x160 Mid Wide.pp.awp</preprocessor>
```

Output File Characteristics

320 x 160 @ 15fps / 250kbps / WMV

Modification Suggestions

- For PAL sources, change the frame rate to 12.5.
- For smoother motion video, increase the frame rate:
 - For PAL sources, change the frame rate to 25.
 - For NTSC sources, change the frame rate to 29.97.
- Consider changing encode mode to 2 pass VBR. The encoding will take longer, but the video quality will be improved. Variable bitrates can cause buffering when connections to the streaming server are equal to the bitrate.

WM 320x240 Mid

Creates a "medium bitrate" Windows Media file for web distribution. Common adjustments are to bitrate where increasing bitrate adds to filesize, but creates higher quality output. Other modifications include adjusting frame size and frame rate. Frame size and frame rate adjustments can affect video quality. Higher frame rates and sizes without an increased bitrate might negatively impact picture quality.

Profile Components

```
<microsoft>WM 320x240 Mid.WM 320x240 Mid.ms.awp</microsoft>
<preprocessor>WM 320x240 Mid.WM 320x240 Mid.pp.awp</preprocessor>
```

Output File Characteristics

320 x 240 @ 15fps / 250kbps / WMV

Modification Suggestions

- For PAL sources, change the frame rate to 12.5.
- Consider changing encode mode to 2 pass VBR. The encoding will take longer, but the video quality will be improved. Variable bitrates can cause buffering when connections to the streaming server are equal to the bitrate.

WM 400x200 High Wide

Creates a "high bitrate" Windows Media file for web distribution. The Windows Media file will be widescreen format. Common adjustments are to bitrate where increasing bitrate adds to filesize, but creates higher quality output. Other modifications include adjusting frame size and frame rate. Frame size and frame rate adjustments can affect video quality. Higher frame rates and sizes without an increased bitrate might negatively impact picture quality.

Profile Components

```
<microsoft>WM 400x200 High Wide.WM 400x200 High Wide.ms.awp</microsoft>
<preprocessor>WM 400x200 High Wide.WM 400x200 High Wide.pp.awp</preprocessor>
```

Output File Characteristics

400 x 200 @ 30fps / 400kbps / WMV

Modification Suggestions

- For smoother motion video, increase the frame rate:
 - For PAL sources, change the frame rate to 25.
 - For NTSC sources, change the frame rate to 29.97.
- Consider changing encode mode to 2 pass VBR. The encoding will take longer, but the video quality will be improved. Variable bitrates can cause buffering when connections to the streaming server are equal to the bitrate.

WM 400x300 High

Creates a "high bitrate" Windows Media file for web distribution. Common adjustments are to bitrate where increasing bitrate adds to filesize, but creates higher quality output. Other modifications include adjusting frame size and frame rate. Frame size and frame rate adjustments can affect video quality. Higher frame rates and sizes without an increased bitrate might negatively impact picture quality.

Profile Components

```
<microsoft>WM 400x300 High.WM 400x300 High.ms.awp</microsoft>
```

```
<preprocessor>WM 400x300 High.WM 400x300 High.pp.awp</preprocessor>
```

Output File Characteristics

400 x 300 @ 30fps / 400kbps / WMV

Modification Suggestions

- For smoother motion video, increase the frame rate:
 - For PAL sources, change the frame rate to 25.
 - For NTSC sources, change the frame rate to 29.97.
- Consider changing encode mode to 2 pass VBR. The encoding will take longer, but the video quality will be improved. Variable bitrates can cause buffering when connections to the streaming server are equal to the bitrate.

WM 400x300

Creates a "high bitrate" Windows Media file for web distribution. Common adjustments are to bitrate where increasing bitrate adds to filesize, but creates higher quality output. Other modifications include adjusting frame size and frame rate. Frame size and frame rate adjustments can affect video quality. Higher frame rates and sizes without an increased bitrate might negatively impact picture quality.

Profile Components

```
<microsoft>WM 400x300.ms.awp</microsoft>
```

```
<preprocessor>WM 400x300.pp.awp</preprocessor>
```

Output File Characteristics

400 x 300 @ 30fps / 400kbps / WMV

Modification Suggestions

- For smoother motion video, increase the frame rate:

- For PAL sources, change the frame rate to 25.
 - For NTSC sources, change the frame rate to 29.97.
- Consider changing encode mode to 2 pass VBR. The encoding will take longer, but the video quality will be improved. Variable bitrates can cause buffering when connections to the streaming server are equal to the bitrate.

WM CIF

Creates a Windows Media output file conforming to CIF resolution (352 x 288). This is primarily intended for broadband web distribution. Adjustments can be made as needed to bitrate/frame rate/frame size.

Profile Components

```
<microsoft>WM CIF.WM CIF.ms.awp</microsoft>
```

```
<preprocessor>WM CIF.WM CIF.pp.awp</preprocessor>
```

Output File Characteristics

352 x 288 @ 30fps / 750Kbps / Windows Media 9 Format

Modification Suggestions

- For smoother motion video, increase the frame rate:
 - For PAL sources, change the frame rate to 25.
 - For NTSC sources, change the frame rate to 29.97.
- Consider changing encode mode to 2 pass VBR. The encoding will take longer, but the video quality will be improved. Variable bitrates can cause buffering when connections to the streaming server are equal to the bitrate.

WM QCIF

Creates a Windows Media output file conforming to CIF resolution (176 x 144). This is primarily intended for broadband web distribution. Adjustments can be made as needed to bitrate/frame rate/frame size..

Profile Components

```
<microsoft>WM QCIF.WM QCIF.ms.awp</microsoft>
```

```
<preprocessor>WM QCIF.WM QCIF.pp.awp</preprocessor>
```

Output File Characteristics

176 x 144 @ 30fps / 180Kbps / Windows Media 9 Format

Modification Suggestions

- For smoother motion video, increase the frame rate:
 - For PAL sources, change the frame rate to 25.
 - For NTSC sources, change the frame rate to 29.97.
- Consider changing encode mode to 2 pass VBR. The encoding will take longer, but the video quality will be improved. Variable bitrates can cause buffering when connections to the streaming server are equal to the bitrate.

Setting the Default Profile Directory

Procedure

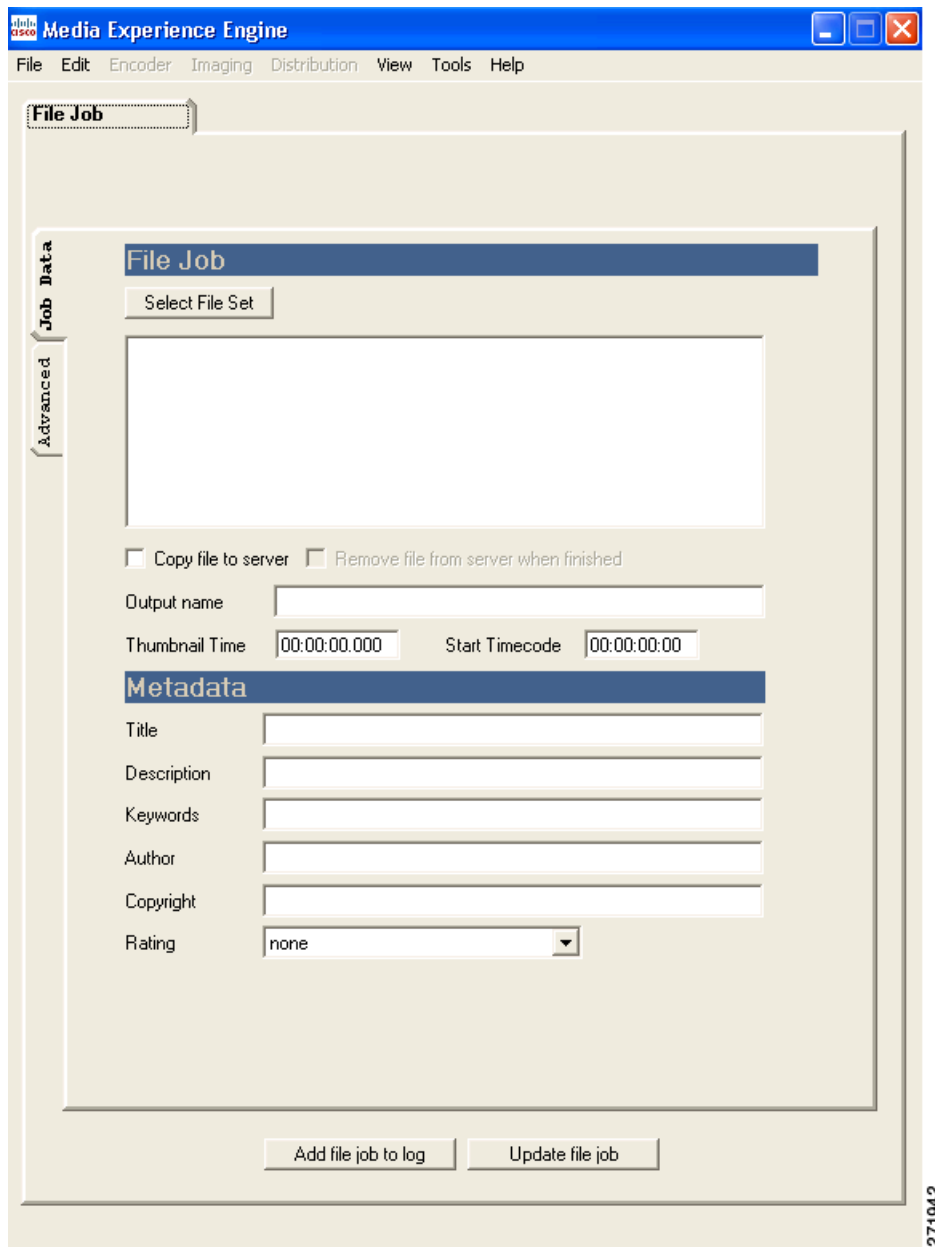
- Step 1** From the main menu, click **File > Set Profile Directory**. The submenu displays with a check next to the currently selected profile directory path.
 - Step 2** If you want to change the default profile directory, click **Browse**.
 - Step 3** Browse to the desired profile directory folder, and click **OK**.
-

Creating a New Job Profile

Procedure

- Step 1** Log into the CLUI. The main window displays, as shown in [Figure 4-1](#).

Figure 4-1 Cisco MXE 3000 Main Window



- Step 2** On the main menu, click **File > New Job Profile**. The Cisco MXE 3000 adds a Preprocessor tab.
- Step 3** Adjust Preprocessor settings as needed. See also: [Adding Preprocessor Settings to a Job Profile \(CLUI\)](#).
- Step 4** From the main menu, click **Encoder**, and add at least one encoder to the Job Profile. See also: [Adding Encoders to a Job Profile \(CLUI\)](#).
- Step 5** (Optional) From the main menu, click **Distribution**, and add one or more Distribution tabs to the Job Profile. See also: [Adding Distribution Settings to a Job Profile \(CLUI\)](#).
- Step 6** From the main menu, click **File > Save Job Profile**.

Step 7 Name the profile, and click **OK**.



Note Do not begin the Job Profile name with a space, and limit the complete length of the file name, including the full path to 256 characters.

Creating a New Job Profile from an Existing Job Profile

Use this procedure to create a new master profile with all the settings of the existing profile and to link the two profiles so that changes to one are reflected in both profiles. The link between the profiles is indicated by the parenthesis on the type tab in the Main Window, for example MPEG (Joost).



Tip

To remove the link between the profiles, rename the tab by right-clicking the type tab and clicking **Change Tab Name**.

Procedure

Step 1 Log into the CLUI.

Step 2 On the main menu, click **File > Open Job Profile**. A browser window will open to the default profile location set in [General Preferences](#).

Step 3 Double-click a Job Profile (similar to the one you want to create) to open it.

Step 4 Make any necessary changes to the various tabs in the Job Profile.

Step 5 Click **File > Save Job Profile As**, and provide a new name for the new Job Profile.



Note Do not begin the Job Profile name with a space, and limit the complete length of the file name, including the full path to 256 characters.

Using a Job Profile to Submit a Job

Procedure

Step 1 From the main menu, click **File > Open Job Profile**. A browser window will open to the default profile location defined in [General Preferences](#). See also: [Editing an Existing Job Profile](#).

Step 2 From the Locate a Job Profile browser window, double-click the desired Job Profile to open it.

Step 3 Click each tab to add or adjust settings, and, from the **File Job** tab, click **Add file job to log**. See also: [Job Log Window: Managing Jobs Before Submission](#).

Editing an Existing Job Profile



Caution

Jobs in the Job Log window (unsubmitted jobs) that use a particular profile will be affected by any changes to that profile. Jobs in the Job Status window (submitted jobs) will not be affected. See also: [Job Log Window: Managing Jobs Before Submission](#) and [Job Status Window: Managing Submitted Jobs](#).

Procedure

-
- Step 1** From the main menu, click **File > Open Job Profile**. If a Job Profile is currently open, you will be asked if you want to save the current profile.
- Step 2** Click **Yes** or **No**. A browser window will open to the default profile location set in [General Preferences](#).
- Step 3** Double-click a profile name to open it.
- Step 4** Make any necessary changes to the various tabs in the profile.
- Step 5** Click **File > Save Job Profile**.

or

Click **Save Job Profile As** to save the updated Job Profile under a new name without changing the original file. See also: [Creating a New Job Profile from an Existing Job Profile](#) for information about linked profiles.



Note

Do not begin the Job Profile name with a space, and limit the complete length of the file name, including the full path to 256 characters.

Deleting a Job Profile



Caution

Jobs already in the Job Log window (unsubmitted jobs) that have their Job Profile deleted (as outlined below) will encounter an error when they are submitted. Jobs in the Job Status window (submitted jobs) will not be affected. See also: [Job Log Window: Managing Jobs Before Submission](#) and [Job Status Window: Managing Submitted Jobs](#).

-
- Step 1** From the main menu, click **File > Open Job Profile**. A browser window will open to the default profile location defined in [General Preferences](#).
- Step 2** Select the unwanted profile from the list.
- Step 3** Press the **Delete** key on your keyboard to delete the selected profile. A Confirm File Delete pop-up window displays.
- Step 4** Click **Yes** to confirm the deletion.
-

Copying a Job Profile

Procedure

- Step 1** From the main menu, click **File > Open Job Profile**. A browser window will open to the default profile location defined in [General Preferences](#).
- Step 2** Select the Job Profile to be copied, and click **OK**.
- Step 3** Click **File > Save Job Profile As**.
- Step 4** Enter a name for the new copy of the Job Profile.



Note Do not begin the Job Profile name with a space, and limit the complete length of the file name, including the full path to 256 characters.

- Step 5** Click **OK** to save.
-

