

Welcome to the *ProMedia Carbon MP Quick Start Guide*. This guide includes the following sections:

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**NOTE:** To access the documentation in the resource center, download and install the latest version of Adobe Reader from <http://get.adobe.com/reader/>.

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## Getting Started with ProMedia Carbon MP

This section provides Quick Start instructions for getting started with ProMedia Carbon MP. Refer to the *ProMedia Carbon MP 3.22 User Guide* for a complete overview and instructions on Carbon transcoding.

**To get started with Carbon, follow these steps:**

1. Make sure the content you want to transcode is accessible. For example, you can access content from your S3 storage using the TntDrive™ software located on the Carbon MP desktop. Refer to [Using TntDrive](#) for more information.
2. Click the Carbon MP icon to launch Carbon MP. If you receive an error message, close the message and try relaunching again in a few minutes. (Depending on the instance type, Carbon MP can take several minutes to start after the EC2 instance has been initialized or restarted.)
3. In Carbon MP, perform the following actions:
  - a. [Add Source Files](#)
  - b. [Assign Target Formats](#)
  - c. [Convert Files](#)

### Add Source Files

**To add source files:**

1. Click the **Source** tab.
2. Click **Add**, as shown in [Figure 1](#).

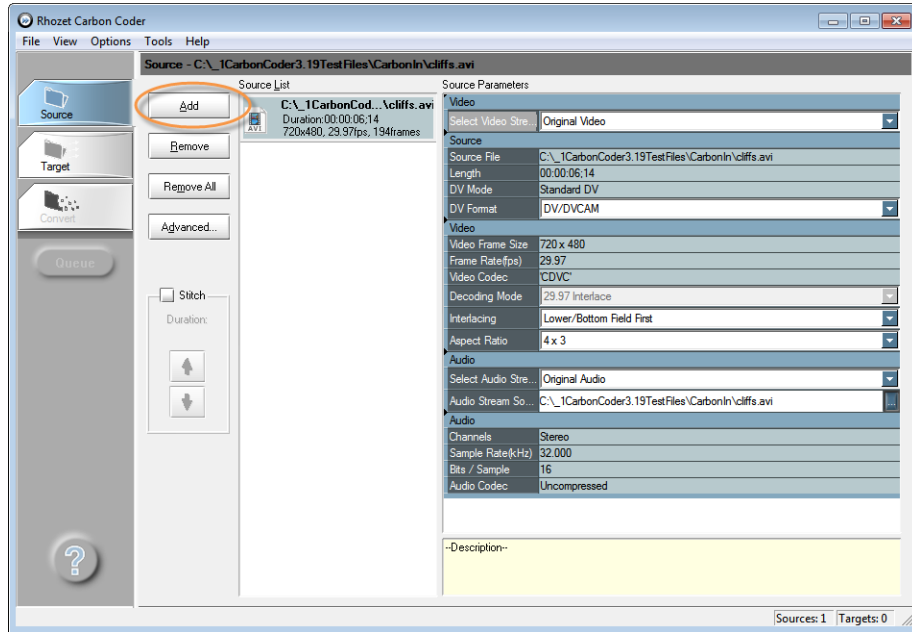


Figure 1: Adding Source Files

3. Select the file you want to transcode, and click **Open**.  
You will now see the selected file in the **Source List**.

## Assign Target Formats

To assign target formats:

1. Click the **Target** tab.
2. Click **Add**, as shown in [Figure 2](#).

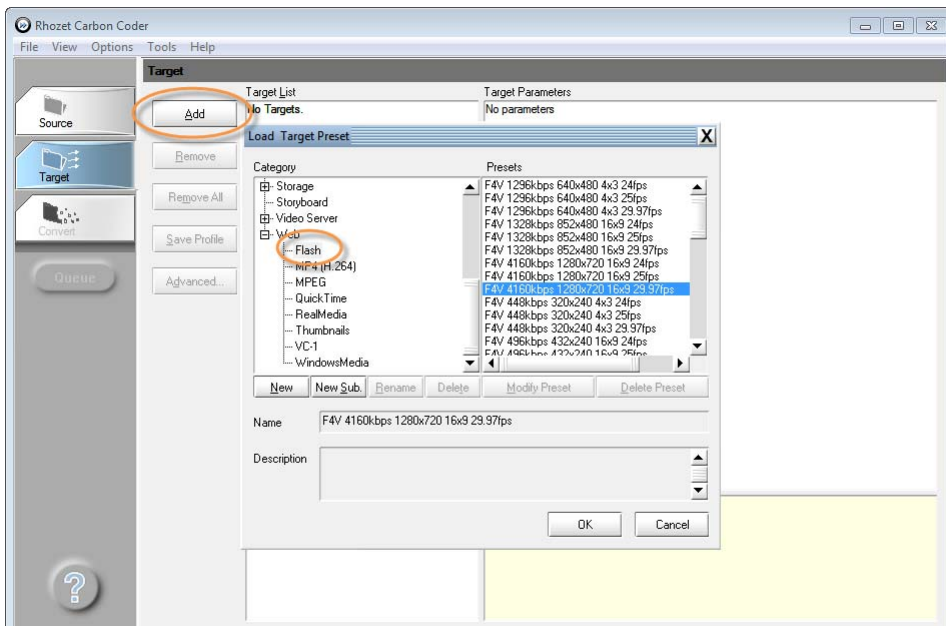


Figure 2: Adding Target Formats

3. In the **Load Target Preset** window, select a desired category on the left side.

4. Select (+) next to a category (if needed) to display its sub-categories. The right side displays all the available presets for that category. When you have selected a preset, you will see complete details of the format settings in the description pane located in the bottom of the **Load Target Preset** dialog box.



**TIP:** You can use **SHIFT + SELECT** or **CTRL + SELECT** to select multiple presets within a single category.

5. Click **OK** to add this preset to your Target window.
6. Repeat [Step 1](#) to [Step 3](#) to add multiple targets.

## Target Parameters Window

The **Target Parameters** window ([Figure 3](#)) displays the properties of the currently selected target in the **Target** tab. All of the resources necessary for managing and modifying your target parameters are available in this window.



**TIP:** You can configure the path for the output folder in this window.

<b>Destination</b>	
Base Name	%s_H264_4160K_2997p
Path	C:\Users\jieber\Documents
Use source filename	<input checked="" type="checkbox"/> Use source filename if required
File Name	C:\Users\jieber\Documents\Source_H264_4160K_2997p(f4v)
<b>Stream-Basic</b>	
Multiplexer Type	F4V
Device Compatib.	No particular Device
<b>Video-Basic</b>	
Use Video	Use if Exist
Width	1280
Height	720
Aspect Ratio	Video: [16 : 9], Pixel: [1 : 1]
Frame Rate(fps)	29.97
Interlacing	Non-Interlaced
<b>Bitrate</b>	
Video Bitrate Mode	CBR
Number of passes	1 pass
Video Bitrate(kbps)	4000
Maximum bitrate [..]	8000
<b>H.264 Encoder S...</b>	
Profile	High
Level	3.1
Number of B-Pict.	2
<b>H.264 Encoder S...</b>	
Active Format De.	Don't Use
<b>Audio-Basic</b>	
Use Audio	Use if Exist
<b>Audio Programs</b>	
Number Of Audio	1
Select Audio Pro...	Audio Program 1
Audio Program T...	MPEG-2 AAC-LC
Channel Configur...	Stereo
Bitrate (kbps)	160
Sample Rate	48.000
Sample Width	16
Language Descri...	eng
CRC Check	<input type="checkbox"/> CRC Check

**Figure 3: Target Parameters Window**

## Convert Files

1. Click the **Convert** tab. The **Convert** tab will be greyed out until you have chosen a source file and a target format.
2. Click **Convert** to begin the encoding process, as shown in [Figure 4](#).

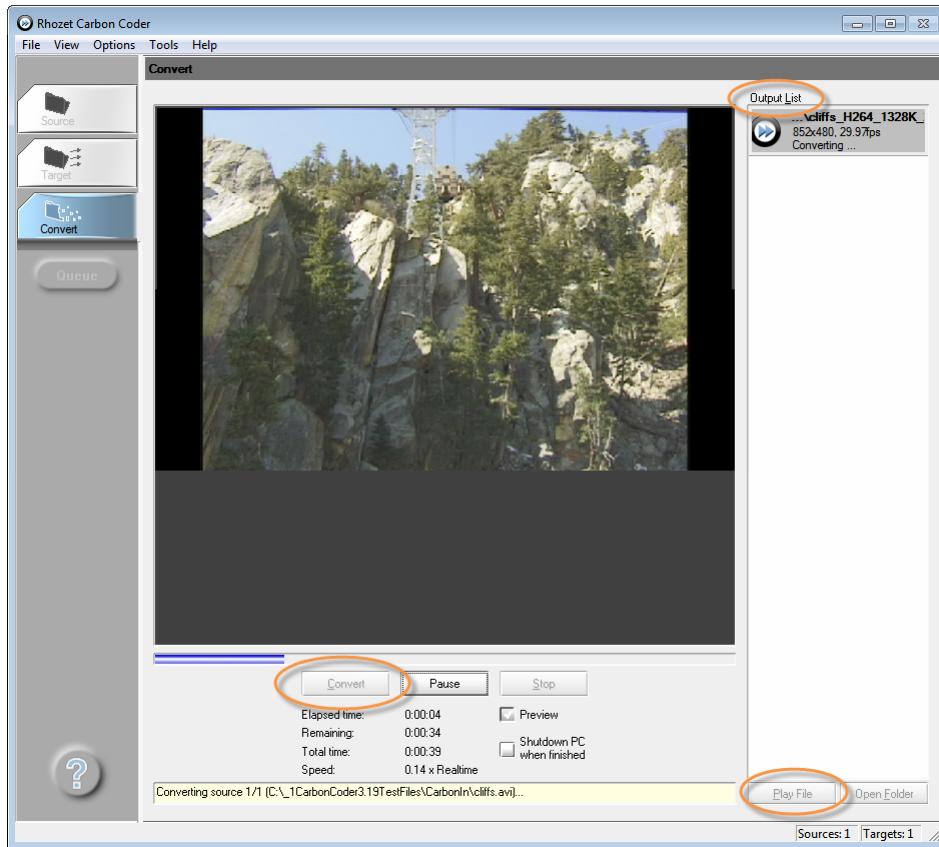


Figure 4: Converting Files

3. Click **Pause** to temporarily halt the encoding process.
4. Click **Stop** to cancel the encoding process.
5. Select the **Preview** check box to turn on or off the video preview.



**CAUTION:** Harmonic recommends that you turn preview off for best performance. Turning preview off will help avoid extra data transfer charges from your AWS EC2 instance. For details about AWS data transfer charges, refer to "Data Transfer" at <http://aws.amazon.com/ec2/pricing/>.

When the conversion is finished, the message "Conversion Finished" will appear in the yellow description box at the bottom of the window.

6. In the **Output List**, select the file you would like to view and then click **Play File**, located on the bottom right of the screen, as shown in [Figure 4](#).

## Configuring Parallel Transcoding

ProMedia Carbon MP supports parallel transcoding; however, Carbon MP is, by default, set to one transcoding job at a time. You will need to use Carbon MP Admin to configure parallel transcoding.

### To configure parallel transcoding:

1. Open Carbon MP Admin.
2. Select **Tools > Kernel Settings > Transcoding Slots**.
3. In the **Transcoding Slots** field, shown in [Figure 5](#), enter the desired number of transcoding slots.

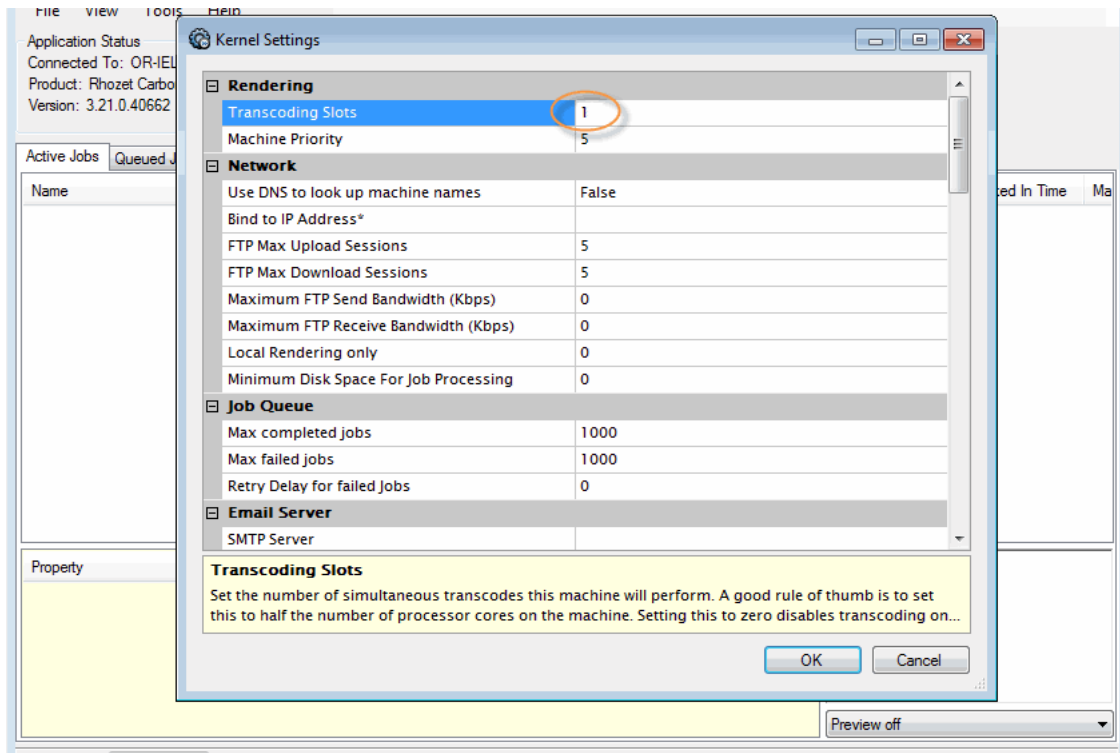


Figure 5: Configuring Transcoding Slots



**CAUTION:** If you configure more than two transcoding slots, be sure to monitor your CPU usage.

## Using TntDrive

TntDrive is third-party software licensed by Harmonic and installed as part of ProMedia Carbon MP.

TntDrive is an optional feature that you can use to map your S3 storage as a windows drive for accessing files.

For instructions on mapping TntDrive to your S3 storage, refer to <http://tntdrive.com/mount-amazon-s3-bucket.php>.

## Troubleshooting Carbon MP

For troubleshooting Carbon MP, the following resources are available:

- Refer to “Appendix A: TroubleShooting Carbon Products” in the *ProMedia Carbon MP 3.22 User Guide*.
- Refer to the Harmonic Transcoding Forum at <http://transcoding.communities.harmonicinc.com>. Here you can get support, share your knowledge, and provide feedback.

## About Apple QuickTime and Carbon MP

Harmonic does not have a distribution agreement with Apple to distribute QuickTime on the AWS Marketplace. Carbon MP 3.22 has been fully qualified with QuickTime for Windows, version 7.6.9. Harmonic recommends that you download and install version 7.6.9.



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**CAUTION:** The latest version of QuickTime for Windows is version 7.7.3, but Harmonic has found compatibility issues between this version of QuickTime and Carbon MP. In addition, QuickTime version 7.6 can be downloaded from the Apple website, but this version also has compatibility issues. For best performance, download and install 7.6.9.

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## Useful Tips

- Be sure you shut down your EC2 instance when it is not in use. Even if you are not using Carbon MP transcoding services, you may incur extra charges from the AWS Marketplace if the EC2 instance is left in the started state.
- Launch an EC2 instance that is in the same region as your S3 storage on the AWS Marketplace. This will prevent you from incurring extra charges for data transfer from the AWS Marketplace.
- If you are using watch folders as part of your transcoding service, please note that your S3 storage mapped to the TntDrive cannot be used as a watch folder. Watch folders can be configured using Carbon Admin. Refer to “Using Carbon MP Admin” in the *ProMedia Carbon MP 3.22 User Guide*.
- Before you terminate the instance, make sure you back up any modified and saved profile and preset data in case you want to reuse this data on another instance. This data can be found at C:\ProgramData\Phozet\Carbon Coder\User Presets.

## Limitations

ProMedia Carbon MP 3.22 is based on ProMedia Carbon 3.22 but has the following limitations:

- The following codecs are unavailable:
  - **MP3:** MP3 source material cannot be decoded. Furthermore, the MP3 and Flash Exporters have been removed from ProMedia Carbon MP. Additionally, the H.264 Exporter, the HTTP Live Streaming Exporter, and the MPEG-2 Exporter version 2 have been affected: either it is not possible to choose MP3 as the audio format in the GUI, or an error is issued when an attempt is made to encode to MP3.
  - **AMR Narrow Band:** The AMR NB choice is removed from the QT 7 Exporter. The QuickTime Plugins, when used with 3G as the Exporter type, will not allow AMR NB audio. For 3GPP the supported format is AAC-LC, and for 3GPP2 the supported formats are AAC-LC and QCELP.
- The Avid Exporter has been removed.