Software Evaluation Guide for AutoMKV* (x264)

“Media Encoding”

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About this Document

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Chapter 1

Processor Performance on AutoMKV* (x264) for media encoding

1.0 Software Description

AutoMKV is an application aiming for easy media conversion between various media formats using various third party codecs. With improved internet speed and enhanced computing power, more users are interested in encoding to different media formats for their various multimedia needs. With AutoMKV and x264 codec, a freeware H.264 encoder, users can easily create media files. For more information and to obtain AutoMKV 0.95c and AviSynth* 2.5.7, please visit (http://forum.doom9.org/showthread.php?t=134478).

1.1 Test Workload Description

This document describes how to create a media file using AutoMKV and x264 codec. The input file used in the document is a raw 416 MB 720x480 DV file and the output is a 253MB H.264 media file.

Chapter 2
Procedure for Evaluating Performance

The following is a procedure for evaluating performance while running AutoMKV 0.95c.

1. Obtain the AutoMKV095.rar file, AutoMKV095c.exe update, and AviSynth 2.5.7 from (http://forum.doom9.org/showthread.php?t=134478).

2. Extract the AutoMKV095.rar to a local folder (an archive manager such as WinRAR* is needed to extract .rar files) and copy AutoMKV095c.exe into that folder.

   Note: You will now have AutoMKV095.exe and AutoMKV095c.exe in the same folder. You can rename AutoMKV095.exe to something such as AutoMKV095_OLD.exe to avoid accidentally running this file instead of the AutoMKV095c executable.

3. Install AviSynth 2.5.7 with default options.

4. Create a local folder C:\AutoMKV_WL and copy the kitesurfing.avi workload file to it. Reboot the system.

5. Launch AutoMKV 0.95c by double-clicking AutoMKV095c.exe.

6. Select "No" when asked if you would like to use the Nero* AAC Encoder.

7. On the main UI, modify the settings as described and illustrated below.

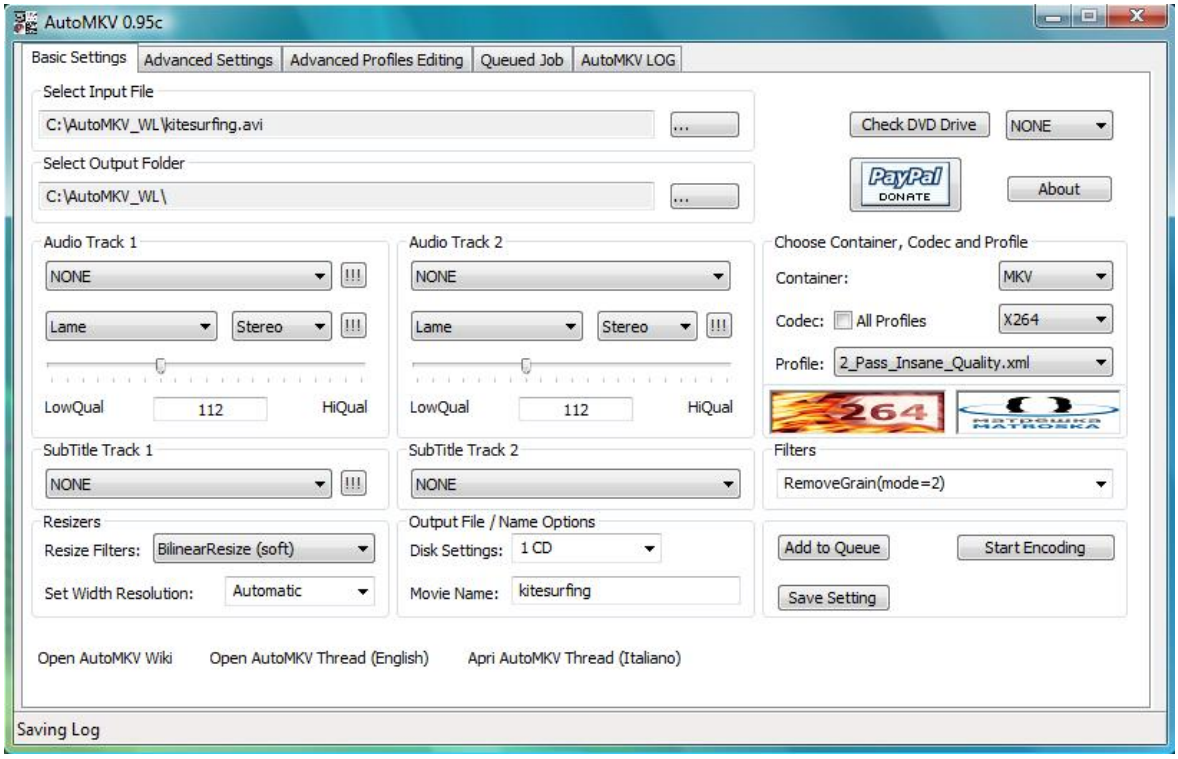
   7.1. Select the input file kitesurfing.avi from the workload folder.

   7.2. In the Audio Track 1 and Audio Track 2 areas, select "NONE" for the top drop down boxes and "Lame" for the bottom left drop boxes. Makes sure the bottom right drop boxes are Stereo and the Qual slider is set at "112".

   7.3. On the bottom left corner, select the Resize Filters to "BilinearResize (soft)"

   7.4. On the right side of UI, select the "MKV" for the container drop down and "X264" for the Codec. These are default values. Select the "2_Pass_Insane_Quality.xml" from the profile drop down box.

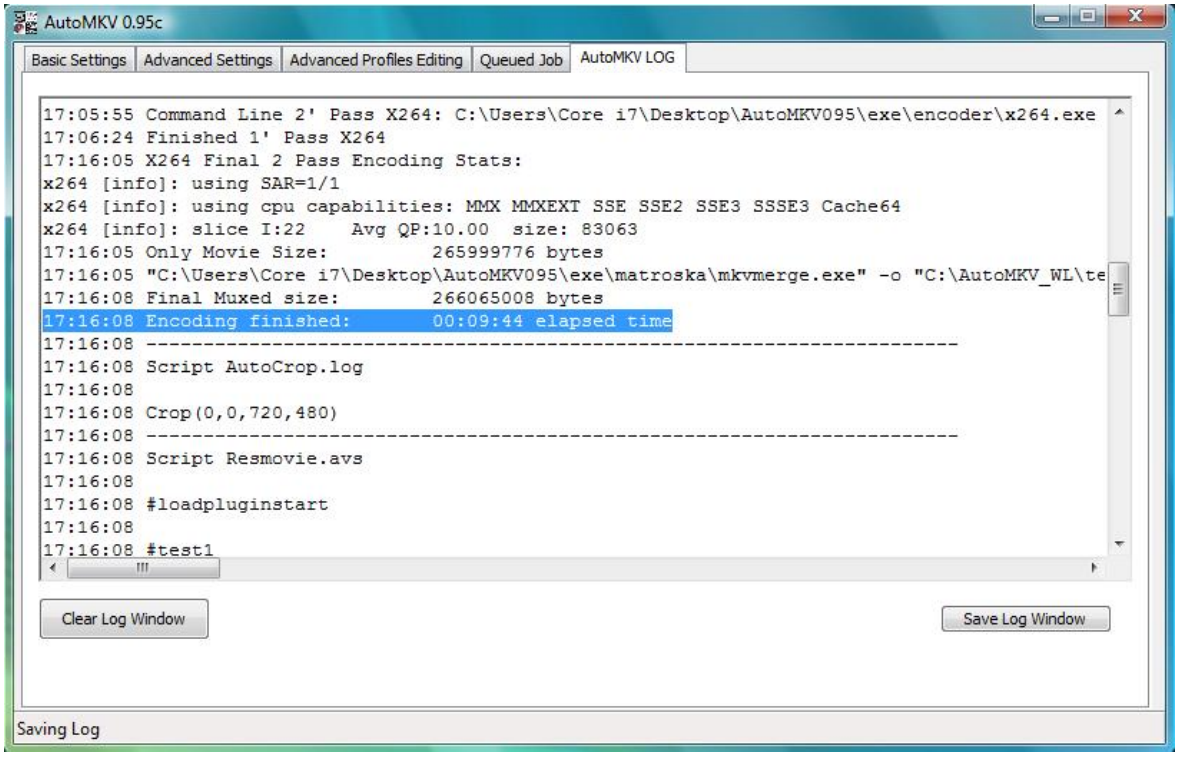
   7.5. Check the filters drop down. The value should be "RemoveGrain(mode=2)".



8. Click on the "Start Encoding" button.

9. Once the encoding is finished, click on the "AutoMKV LOG" tab and look for the elapsed time from the log.

10. The highlighted text shows the actual x264 encoding time (shown below).



11. Examine the output file size. If the file size is 253MB, the encoding time obtained in step 9 is the time to complete H.264 media encoding using x264 codec. If the output file size is not as expected, please double check the settings and rerun the test.

12. Exit AutoMKV and delete all the outputted files in C:\AutoMKV_WL, leaving only the kitesurfing.avi workload file.

13. Repeat steps 5-12 four more times and take the median of the 5 measured encoding times.