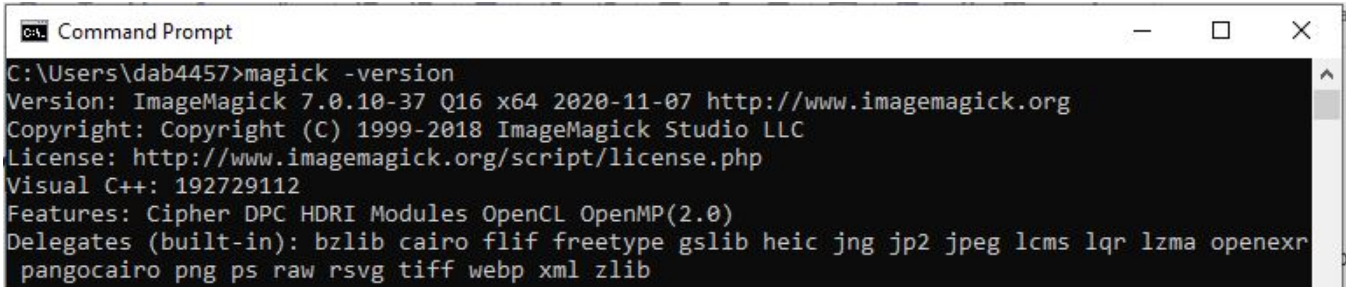# ImageMagick derivative export

ImageMagick is a command-line image manipulation program that can be used to reliably manipulate images in bulk. For simple jobs, it can be much faster and easier to use than Adobe programs, particularly at scale. This page outlines how to use ImageMagick to create JPEG derivatives from TIFFs, but ImageMagick can handle a variety of input and output formats.

## Installation

First, download and install ImageMagick here. On Windows, add the ImageMagick program directory to the path environment variable during installation to make command line operations easier. Adding the directory to the path variable will allow you to run ImageMagick from any directory using the "magick" command. Using the command prompt, run the following command to verify that ImageMagick is correctly installed and mapped:

```
magick -version
```



This output shows that ImageMagick 7.0.10-37 Q16 is installed. Because it ran correctly using the "magick" command, we know it is correctly mapped.

## Simple conversion

ImageMagick is capable of performing a large number of complex functions, however converting a single file uses a relatively straightforward syntax:

```
magick convert <inputpath> <outputpath>
```

The inputpath and outputpath above must include file extensions. For example, the following command will load a TIFF file in folder01 and save a JPEG derivative in folder02:

```
magick convert T:\collectionName\folder01\filename.tif T:\collectionName\folder02\filename.jpg
```

Note that in the above example, the output folder (folder02) must already exist in order for the JPEG to be saved there.

## Batch conversion

Converting in batch is a matter of integrating the Windows dir command to isolate the filename (i.e. dropping the file extension), for use in both the input and output:

```
for /f "tokens=1 delims=." %a in ('dir /b *.tif T:\collectionName\folder01\') do magick.exe
convert T:\collectionName\folder01\%a.tif T:\collectionName\folder02\%a.jpg
```

The above example reads a list of TIFFs within folder01, stores the name of each one (minus the file extension) as "%a", and enters the filename into the same "magick conver input output" syntax as the first example. Note that this example splits the filename at the period character, meaning filenames containing other periods will cause this script to break.

Leave the command prompt window open until the script completes. The program will create 1-2 derivative images at a time, and may output warnings about specific unrecognized TIFF tags. Check that the JPEG derivatives render and that no images are missing when the script completes.