

 **ANIMATE**

 **ANIMATE**
PRO

Utilities User Guide

Legal Notices

Published by Toon Boom Animation Inc.

Corporate Headquarters

5530 St. Patrick
Montreal, Quebec
Canada H4E 1A8
Tel: (514) 278-8666
Fax: (514) 278-2666
toonboom.com

Disclaimer

The content of this manual is covered by a specific limited warranty and exclusions and limit of liability under the applicable License Agreement as supplemented by the special terms and conditions for Adobe® Flash® File Format (SWF). Please refer to the License Agreement and to those special terms and conditions for details.

The content of this manual is the property of Toon Boom Animation Inc. and is copyrighted. Any reproduction in whole or in part is strictly prohibited.

For additional copies of this manual, please contact Toon Boom Animation Inc. at the Corporate Headquarters address.

Copyright © 2010 by Toon Boom Animation Inc. All rights reserved.

Trademarks

Toon Boom Animate and Toon Boom Animate PRO are trademarks owned by Toon Boom Animation Inc. All other trademarks are the property of their respective owners.

Credits

Documentation Development: Peter Cawthorne

Content Development: Marie-Eve Chartrand, Anouk Whissell, Shabana Ali

Art Development: Marie-Eve Chartrand, Anouk Whissell, Shabana Ali, Tania Gray, Annie Rodrigue

Publication Date

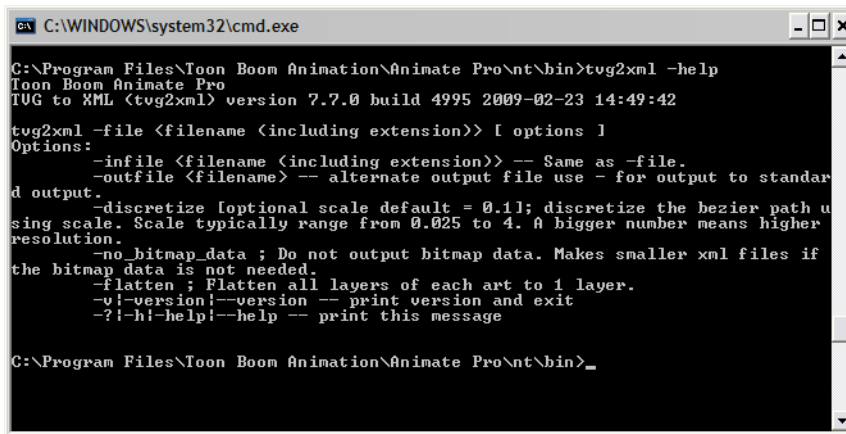
April 2010

Contents

Chapter 1:	
Introduction to Utilities	3
Running a Utility	4
Defining the environment variable for Mac OS X	5
Chapter 2:	
Utilities	7
Pdfimport Utility	8
Swf2tvg Utility	9
Swfimport Utility	10
uinfo Utility	10
utransform Utility	11
Index	15

Chapter 1

Introduction to Utilities



```
C:\WINDOWS\system32\cmd.exe
C:\Program Files\Toon Boom Animation\Animate Pro\nt\bin>tvg2xml -help
Toon Boom Animate Pro
TUG to XML <tvg2xml> version 7.7.0 build 4995 2009-02-23 14:49:42

tvg2xml -file <filename <including extension>> [ options ]
Options:
  -infile <filename <including extension>> -- Same as -file.
  -outfile <filename> -- alternate output file use - for output to standard output.
  -discretize [optional scale default = 0.1]; discretize the bezier path using scale. Scale typically range from 0.025 to 4. A bigger number means higher resolution.
  -no_bitmap_data ; Do not output bitmap data. Makes smaller xml files if the bitmap data is not needed.
  -flatten ; Flatten all layers of each art to 1 layer.
  -v|-version|-version -- print version and exit
  -?|-h|-help|-help -- print this message

C:\Program Files\Toon Boom Animation\Animate Pro\nt\bin>_
```

Toon Boom provides utilities that you can use in Command Prompt and Shells to provide more flexibility and control over the different command options in the software.

In this chapter, you will learn about:

- Running a Utility, on page 4

In this guide, you will find the following utilities:

- Pdfimport Utility, on page 8
- Swf2tvg Utility, on page 9
- Swfimport Utility, on page 10
- uinfo Utility, on page 10
- utransform Utility, on page 11

Running a Utility

Toon Boom includes a number of command line utilities that you can use to convert image formats, bitmap or vector, into other image formats.

These command line utilities are found in your Toon Boom application folder.

For example:

For Toon Boom Animate:

- Using Windows, these utilities are located in:
`\Program Files\Toon Boom Animation\Animate 2\nt\bin`
- Using Mac OS X, these utilities are located in:
`/Applications/Toon Boom Animate 2/tba/macosx/bin`

For Toon Boom Animate Pro:

- Using Windows, these utilities are located in:
`\Program Files\Toon Boom Animation\Animate Pro 2\nt\bin`
- Using Mac OS X, these utilities are located in:
`/Applications/Toon Boom Animate Pro 2/tba/macosx/bin`

To run these utilities, use a Command Prompt or a Terminal window. All of these utilities work on input files that are processed using options you specify to produce an output.

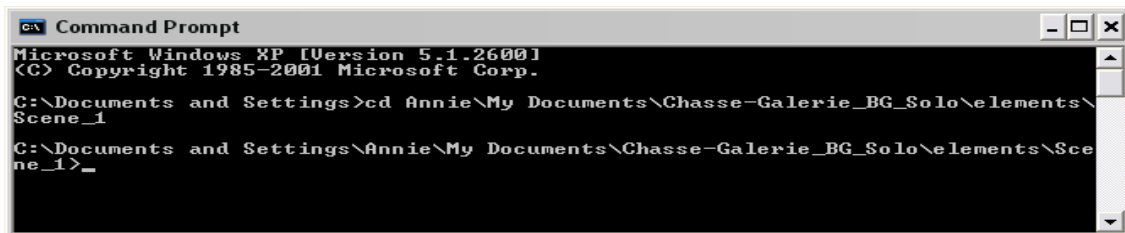
To run a command line utility:

1. Open a Command Prompt (Windows) or Terminal (Mac OS X) window.
 - ▶ Using Windows, click on the Start menu and select **Programs > Accessories > Command Prompt.**



- ▶ Using Mac OS X, open a Finder window and select **Applications > Utilities > Terminal**

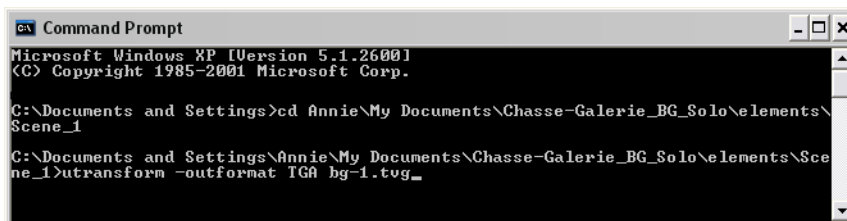
2. In the Command Prompt or Terminal window, switch to the directory that contains the image files that you want to process (element's folder).



3. Type the name of the utility that you want to launch, the options and the name of the file you want to process. The options must be preceded by a dash (-).

Here is an example of how to launch `utransform`:

- ▶ `utransform -outformat TGA bg-1.tvg`





Note: before launching the utility you need to define an environment variable.



Note: If another version of Animate or Animate Pro is still installed on the system, the utility application should be launched from the `\bin` folder. This will make sure that the correct version of the utility is used.

- For help with the options and syntax of the utilities, open the help. To do this, type `-help` after the name of the utility on the command line.

▶ type: `utransform -help`

```

Command Prompt
C:\Documents and Settings\cd Annie\My Documents\Chasse-Galerie_BG_Solo
C:\Documents and Settings\Annie\My Documents\Chasse-Galerie_BG_Solo>utransform -
help_

```

Defining the environment variable for Mac OS X

Before launching the utility you need to define an environment variable.

To define an environment variable:

- Open the Terminal (Application/Utilities/Terminal).
- From Terminal go to `/etc` folder by typing the following:
 - `cd /etc`
- Create a backup of the profile file. You need to be logged in using the root account to be able to do this. If you are not logged in as the root user, you will need to type `sudo` before launching the command:
 - `sudo cp profile profile.bak`
- Edit the `/etc/profile` file using the `vi` text editor. To do this, you need to be logged in with the root account. If not, you must type `sudo` before launching the command. For example:
 - `sudo vi profile`
- Once the file is opened in the editor, press the `[I]` key to switch to the insert mode.
- Go to the end of the file and add the following two lines at the bottom of the file:

For Toon Boom Animate

- `export ANIMATE_BIN_PATH="/Applications/Toon Boom Animate 2/tba/macosx/bin/"`
- `export PATH="$PATH:$ANIMATE_BIN_PATH"`

For Toon Boom Animate Pro

- `export ANIMATEPRO_BIN_PATH="/Applications/Toon Boom Animate Pro 2/tba/macosx/bin/"`
- `export PATH="$PATH:$ANIMATEPRO_BIN_PATH"`

- Once all the information has been typed, you will need to save the file. To do this, press `[Esc]` to exit the insert mode.
- Press the `[:]` key. The `:` should appear on the bottom of the Terminal, if it does not then you are still in insert mode. Make sure you did not type the colon somewhere in the files and press the `[Esc]` key again to exit insert mode.
- Type the letter `w` followed by `!`. You should now have the following typed at the bottom of the Terminal:
 - `:w!`
- Press the `[Return]` key. The file was written.
- To exit `vi` type `:q`.

You should now have the following at the bottom of the Terminal:

- `:q`

- Press the `[Return]` key to quit `vi`. The system will return you to `/etc` in the Terminal.
- Verify the content of the profile file by typing:

- `more profile`

The changes to the profile will be applied the next time you start the Terminal application.

Chapter 2

Utilities

This chapter describes all of the utilities, options and their uses:

- Pdfimport Utility, on page 8
- Swf2tv Utility, on page 9
- Swfimport Utility, on page 10
- uinfo Utility, on page 10
- utransform Utility, on page 11

Pdfimport Utility

The Pdfimport utility is used to import a.PDF or an .AI file as a template without going through the interface. It allows more control and option flexibility over the imported file.

Here is the format you must follow when using Pdfimport:

```
Pdfimport [options] pdf or ai files
```

The available Pdfimport options are:

COMMAND	ACTION
AVAILABLE OPTIONS	
-outdir output_folder	This option defines the folder where the output files will be saved. The defined path is not relative.
-outtemplate output_folder.tpl	This option defines the template name for the converted pages. The defined path can be relative.
-PDF_LINE_ART_STROKE	This option will set the stroke attribute on contours of line art.
-PDF_BREAK_LINE_ART	This option will break the line art at intersection points.
-PDF_GENERATE_COLOUR_ART	This option will extract the centreline of the line art and put it in the colour art.
-PDF_SUPPORT_CMYK	This option will automatically convert CMYK colours to RGB. Otherwise, CMYK colours would import as a red colour.
-PDF_SEPARATE_LAYERS	This option will use the Illustrator top level groups as separate drawing names.
-PDF_FLATTEN	Use this option to perform a flatten on each drawings while importing.
DESCRIPTION OF SWITCHES:	
-outtemplate output_folder.tpl	Output template name for converted pages.
-outdir dir	This option defines the output folder for the templates (the defined folder must already exists.)
-usage	This option will display the usage.
-? -h -help --help	This option will display the help information.
-v -version --version n	This option will display the version information.

- The -outdir and -outtemplate options are exclusive, they can not be used together.
- You can only specify one file with the outtemplate option.
- If the CMYK colours option is not enabled, the application will output the following error message:
CMYK: Unsupported colorSpace
- Pdfimport does not overwrite existing templates but will overwrite files in outdir.

Swf2tvg Utility

The Swf2tvg utility is used to import an SWF file into your scene without using the interface. This will create a .tvg file for each frame. Use the different commands to control the options.

Here is the format you must follow when using Swf2tvg:

```
Swf2Tvg -palette <palette_file> -usage -help -use_different_palettes
-base_name <base_out_name> -outdir <output_directory> -bbox_recenter
-ignore_position -start_index <number> file1 [file2] [file3]
```

Here are the available Swf2tvg options:

COMMAND	ACTION
DESCRIPTION OF SWITCHES	
-palette <palette_file>	This option is used to add the colours of the SWF file to the palette file and save it.
-use_different_palettes	This option is used to create a new palette for each SWF file and DOES NOT save any palette.
-base_name <name>	Use this option to automatically rename all generated drawings name-x.tvg where x is an increasing index.
-start_index <index>	Use this option to define the starting index to name the drawings. The default value is 1.
-outdir <dir>	Use this option to define the output directory for all generated drawings.
-use_place_objects	This option will transform and position the imported drawings following the position on the stage in the Flash project. This option uses the information that is contained in the SWF PLACE_OBJECT record. Note: this option does not use -start_index.
-frame_alias <list>	This option uses the comma separated list of names to generate timing information. This is mainly to convert models. e.g. -frame_alias FR_%.2d,3Q_%.2d,BK_%.2d"
-base_color_index <index>	Use this option to base the colour index in higher 32 bits.
-bbox_recenter	This option centres drawings according to their bounding box. This option implies -ignore_position.
-ignore_position	Use this option to ignore all sceneplanning information.
-usage	This option will display the usage.
-? -h -help --help	This option will display the help information.
-v --version --version	This option will display the version information.

NOTE:

- If -outdir is not specified, the files will be written in the SWF file current directory.
- You can specify any SWF file or PLT file. The PLT files will be read and used to match colours but will not be modified. The only palette modified is the palette specified by the -palette switch.

Swfimport Utility

The Swfimport utility is used to create a template from a SWF file.

Here is the format you must follow when using Swfimport:

```
SwfImport [options] swf_files
```

Here are the available Swfimport options:

COMMAND	ACTION
AVAILABLE OPTIONS	
-outdir output_folder	This option specifies the output folder for the generated templates
-applycolourtransform	This option will apply colour transforms from SWF onto the drawings.
-paletteName name_of_palette	Use this option to specify the name of the palette file to use with colour recovery.
DESCRIPTION OF SWITCHES	
-outdir dir	This option specifies the output folder for the templates (The specified folder must already exist.)
-usage	This option will display the usage.
-? -h -help --help	This option will display the help information.
-v --version --version	This option will display the version information.

NOTE:

Swfimport does not overwrite templates.

uinfo Utility

The uinfo utility is used to display the following information about a specified bitmap file.

- Name
- Resolution
- Format
- Channels
- Bites per Channels

Here is the format you must follow when using uinfo:

```
uinfo program input_files
```

COMMAND	ACTION
AVAILABLE OPTIONS	
-? -h -help --help	This option will display the help information.
-v --version --version	This option will display the version information.

utransform Utility

The utransform program converts vector images to pixmaps and between different pixmap file formats. For example, you can use utransform to convert a TGA to an SGI file. Or, you can convert a TVG file to a Photoshop® PSD file.

Here is the format you must follow when using utransform:

```
$ utransform -file [file name, including extension] [options]
```

Here are the available utransform options:

COMMAND	ACTION
OPTIONS	
-outformat <format>	This is the file type you want to output with utransform. The following are the file formats supported by utransform: TGA, TGA1, TGA3, TGA4, SGI, SGI1, SGI3, SGI4, SGIDP3, SGIDP4, OMFJPEG, OPT, OPT1, OPT3, OPT4, PSD, PSD1, PSD3, PSD4, PSDDP3, PSDDP4, TVG, PDF, PNG, PNG4, YUV, PAL, and SCAN.
-outfile <name>	This option is for the file name of the output file. If you are processing multiple files, you will not be able to control their final name. If not specified, the files created by utransform will have the same file name as the original. The only difference will be the file extension.
-debug	This option will display information on the different steps of the process as well as the messages related to errors that might have occurred.
-? -h -help --help	This option will display the help information.
-v --version --version	This option will display the version information.
IMAGE OPTIONS	
-resolution <w> <h>	This option manages vector and pixmap input files. It indicates the height and width of the output file.
-resolution scan	This option will use the.scan info to determine the drawing resolution when unvectorizing from the Control Centre.
-scale <s>	Use this option to scale the height and the width of the output file by the value you enter. The resolution of the image must be able to accommodate the new image size.
-xscale <s>	Use this option to scale the width of the output file. The resolution of the image must be able to accommodate the new image size.
-yscale <s>	Use this option to scale the height of the output file. The resolution of the image must be able to accommodate the new image size.
-turn <degrees>	Use this option to rotate the output file by the amount of degree entered.
-ps <in> <out>	Use this option to convert the shape of the pixel. This option inputs and outputs pixel shapes for formats other than YUV and PAL. The possible values are: square, NTSC and PAL.
-bgcolor <r> <g> 	This option defines the background colour for TVG images. The range is either 0-1 (a percentage of 255) or 0 - 255. The default value is white.

COMMAND	ACTION
-balpha <a>	This is the alpha value of the background. The range is either 0-1 or 0 - 255. The default value is opaque (255).
-arttoart	Will perform the same function as lineArtToColourart from the UI except that it can use any source art combination and output the result in any other art, clearing it before adding. 1 = underlay, 2 = colourArt, 4 = lineArt, 8 = overlay
-addoverlay	Specify an overlay file to add in composition
-addunderlay	Specify an underlay file to add in composition
-useoverlaylayer	Specify art from drawing to use in overlay, (lineart,colorart,overlayart,underlayart)
-useunderlaylayer	Specify art from drawing to use in underlay, (lineart,colorart,overlayart,underlayart)
-clearlayers	Clear specific art layers, (lineart,colorart,overlayart,underlayart)
-automatte	Computes the auto matte of art src and put it in art dst. (src and dst must be different and must be one of lineart, colorart, overlayart, underlayart). Radius is expressed in model coordinates, 1 field of a 12 fields drawing is roughly 200 model units.
-copystrokes	Copy original strokes in destination when doing an auto-matte.
VECTOR OPTIONS	
-antialiasing <quality><exponent>	quality = low, medium-low, medium or high exponent = between 0-3 This option is for converting vector images to pixmaps. You can specify the quality of the anti-aliasing process (low, medium-low, medium or high) or the exponent (between 0-3).
-nolinetexture	This disables the generation of line textures from TVG files.
-nolineart	Use this option to exclude line art from the output file.
-nocolorart	Use this option to exclude colour art from output file.
-move <x> <y>	Use this option to recentre the output file, output pixels or world units for TVG output Note: Useful values for TVG output might be 714.285000 in x or 535.713750 in y
-flatten	Use this option to flatten the drawing and merge its textures. By default the output file format is TVG.
-bboxtvgincrease	This option will increase the .tvg bonding box size. The default value is 5 (percent).
-normalize	This option normalizes the TVG. This implies that the outformat is TVG. If the TVG has a different scaling than 1, it will scale the coordinates and set the scaling to 1.0.
-setfieldsize <f>	Use this option to set the internal scaling of the TVG to an exact field size.
VECTOR TO VECTOR OPTIONS	
-centrelines	Use this option to extract the centrelines of the drawing's line art.
-closegap	Use this option to perform Close gap.

COMMAND	ACTION
-gaplength	Use this option to define a Close gap length value. The default value is 10.
-hairpasses	Use this option to set the number of pass to perform for the remove hair option. The default value is 2.
-hairlength	Use this option to define the value for the hair length. The default is 20.
-keepcolorart	Use this option to keep the existing colour art and extract the centreline over it.
-showstrokes	Use this option to show the contour of line art and centrelines in special colours.
-thickness	Use this option to define the thickness in pixels of the strokes to show.
-fieldsize <fs>	Use this option to set the field size for PDF output. The default field size is 12.
-lineartstrokescolor <r> <g> <a>	Use this option to define the red, green, blue, alpha values for the line art stroke colour.
-colorartstrokescolor <r> <g> <a>	Use this option to define the red, green, blue, alpha values for the colour art stroke colour.
-nofitcolorart	Use this option if you do NOT want to generate Bezier curves for colour art.
-tvgversion <version>	This option will convert to older/supported vector format product version: v720 = 1005 v710 = 1005 v702 = 1004 (Early version of 7.0.2 were using1003.) v700 = 1003
ALIGNMENT OPTIONS	
-align <RULE>	Use this option to generate a bitmap that will fit inside Animate with a read module aligned with a defined rule. RULE can be: AS_IS, CENTER_TB, CENTER_LR, CENTER_FIRST_PAGE_HORIZONTAL, CENTER_FIRST_PAGE_VERTICAL, TOP, BOTTOM, LEFT, RIGHT.
-dpi <dpi>	Use this option to define the output resolution for the bitmap image in dots per inch. The default resolution is 75 dpi.
-paper_size	Size of paper in inches default is 12.
-margin	Number of fields to keep around the TVG.-elementId <fields> ; Field size of element.-sar <scene_aspect_ratio> ; Scene aspect ratio default is 1.33333. Use 1.7777777 for 16/9 scenes.
-box	Use this box to render.

Index

A

- about
 - utilities 3
- alignment
 - options
 - utransform 13

B

- bitmap conversion 4, 11

C

- command line
 - utility 4
- command line utilities
 - location
 - Animate 4
 - run 4
 - MacOSX 4
 - Windows 4
- convert
 - image formats 11

F

- format
 - Pdfimport 8
 - Swf2tvg 9
 - Swfimport 10
 - unifo 10
 - utransform 11

I

- image
 - options
 - utransform 11
- image format
 - conversion 4, 11

O

- options
 - alignment
 - utransform 13
 - image
 - utransform 11
 - Pdfimport 8
 - Swfimport 10
 - unifo 10
 - utransform 11
 - vector
 - utransform 12
 - vector to vector
 - utransform 12

P

- Pdfimport
 - format 8
 - options 8
 - outdir output_folder 8
 - outtemplate output_folder.tp 8
 - PDF_BREAK_LINE_ART 8
 - PDF_FLATTEN 8
 - PDF_GENERATE_COLOUR_ART 8
 - PDF_LINE_ART_STROKE 8

- PDF_SEPARATE_LAYERS 8
- PDF_SUPPORT_CMYK 8
- switches 8
 - ?|-h|-help|--help 8
 - outdir dir 8
 - outtemplate output_folder.tpl 8
 - usage 8
 - v|-version|--versio 8
- utility 8

- pixmap
 - conversion 11

R

- run
 - utility 4

S

- Swf2tvg
 - format 9
 - switches 9
 - ?|-h|-help|--help 9
 - base_color_index 9
 - base_name 9
 - bbox_recenter 9
 - frame_alias 9
 - ignore_position 9
 - outdir 9
 - palette 9
 - start_index 9
 - usage 9
 - use_different_palettes 9
 - use_place_objects 9
 - v|-version|--version 9
 - utility 9
- Swfimport
 - format 10
 - options 10
 - applycolourtransform 10
 - outdir output_folde 10
 - paletteName name_of_palette 10
 - switches 10
 - ?|-h|-help|--help 10
 - outdir dir 10
 - usage 10
 - v|-version|--version 10
 - utility 10
- switches
 - Pdfimport 8
 - Swf2tvg 9
 - Swfimport 10

U

- unifo
 - format 10
 - options 10
 - ?|-h|-help|--help 10
 - v|-version|--version 10
 - utility 10
- utilities
 - about 3
 - Pdfimport 8
 - Swf2tvg 9
 - Swfimport 10
 - unifo 10
 - utransform 11
- utility
 - running 4

utransform
alignment options
-align **13**
-dpi **13**
format **11**
help
 MacOSX
 example of **5**
 Windows
 example of **5**
Image options
11
-addoverlay **12**
-addunderlay **12**
-arttoart **12**
-automatte **12**
-bgalpha **12**
-bgcolor **11**
-box **13**
-clearlayers **12**
-copystrokes **12**
-margin **13**
-paper_size **13**
-ps **11**
-resolution scan **11**
-scale **11**
-turn **11**
-useoverlaylayer **12**
-useunderlaylayer **12**
-xscale **11**
-yscale **11**
launch
 Windows
 example of **4**
options **11**
-?|-h|-help|--help **11**
alignment **13**
-debug **11**
image **11**
-outfile **11**
-outformat **11**
-v|-version|--version **11**
vector **12**
vector to vector **12**
utility **11**
vector options
-antialiasing **12**
-bboxtvgincrease **12**
-flatten **12**
-move **12**
nocolorart **12**
-nolineart **12**
-nolinetexture **12**
-normalize **12**
-setfieldsize **12**
vector to vector options
-centreline **12**
-closegap **12**
-colorartstrokescolor **13**
-fieldsize **13**
-gaplength **13**
-hairlength **13**
-hairpasses **13**
-keepcolorart **13**
-lineartstrokescolor **13**
-nofitcolorart **13**
-showstrokes **13**

-thickness **13**
-tvgversion **13**

V

vector
 options
 utransform **12**
vector conversion **4, 11**
vector to vector
 options
 utransform **12**