

SVS Image Generator (SIG) User Guide

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What is the SVS Image Generator?

The SIG is a Windows batch file that automates the generation of bitmap image files from the SPBLOBTHIN model output files through the Stand Visualization System. The SIG compiles the images into a list that is viewable as a “movie” through the SVS ViewPic tool.

Installing the SIG

Prerequisites

The SIG is designed to run in any Windows system equipped with the Stand Visualization System (SVS). You can get more information about SVS [here](#).

Installation

The SIG applications uses two Windows batch (.bat) files:

sig.bat - the batch file that performs the conversions and file generation
sig_config.bat - holds the settings that the sig.bat uses at runtime

Basic Installation

The basic installation assumes that you’ve installed the SVS application in the standard location of C:\Program Files\SVS. If this is true, then all you need to do to install the SIG is copy these two files onto your computer. It is recommended that you place these two files into their own directory; this will make it easier to find and run the scripts. This is also where the output files will be located.

- **Open** Windows Explorer - hold down the Windows key + E on your keyboard
- **Create** a new directory to hold the SIG files
 - **Right** click in the right hand pane
 - **Choose** New
 - **Choose** Folder
 - **Type** in the name of the new directory (i.e. SIG)
 - **Hit** Enter
- **Copy** (CTRL+C) the two batch files
- **Paste** (CTRL+V) the files into the new directory

Advanced Installation

If you have installed SVS in a non standard location then you'll need to make some SIG configuration file changes post installation.

- **Follow** the [Basic Installation steps](#)
- **Right** click the sig_config.bat file
 - **Choose** Edit
- **Edit** the SVS_APP_DIR line
 - **Change** "c:\Program Files"\svs to the location of your SVS installation. If your directory path has a space in the name then you must enclose the name in double quotes.
- **Save** and **Exit**
 - **Click** File
 - **Choose** Save
 - **Click** File
 - **Choose** Exit

Running the SVS Image Generator

There are two ways you can run the SIG: 1) through the DOS command line 2) as a batch file. Both options result in the same script being run and the same output being generated. Which option you choose depends on user preferences and familiarity with the Windows operating system.

Running the SIG from the DOS command line

- **Open** a new DOS windows
 - **Click** the Windows Start menu
 - **Choose** Run
 - **Type** "cmd" without the quotes
 - **Click** OK or hit Enter
- **Change** directories to the location of the SIG scripts
 - **Type** "cd /D C:\sig_directory_name" without the quotes; replacing "c:\sig_directory_name" with the name of the directory you placed the SIG batch files.
 - **Hit** Enter
- **Type** sig.bat
or
 - **Include** the project name and movie type to view upon completion (spot or tsvs)
 - **Type** sig.bat project_name movie_type
- **Follow** the on screen prompts

Running as a Batch File

Open Windows Explorer - hold down the Windows key + E on your keyboard

Click on the directory where the SIG files are located

Double Click on the sig.bat file

This will open a new command window and start the script

Follow the on screen prompts

Replaying Movies

You can view the “movies” at anytime without re-running the SIG. The view_spot.bat and view_tsvs.bat files are designed specifically for this purpose. Just like the SIG, you can operate these files from the DOS command line or as a batch file.

Replaying the Movie From the Command Line

- **Open** a new DOS windows
 - **Click** the Windows Start menu
 - **Choose** Run
 - **Type** “cmd” without the quotes
 - **Click** OK or hit Enter
- **Change** directories to the location of the project that you are interested in
 - **Type** “cd /D C:\data_directory\my_project” without the quotes; replacing “C:\data_directory\my_project” with the name of the directory specific to your project.
 - **Hit** Enter
- **Type** view_spot.bat or view_tsvs.bat

Replaying the Movie From a Batch File

Open Windows Explorer - hold down the Windows key + E on your keyboard

Click on the project directory

Double Click on the view_spot.bat or view_tsvs.bat file

Understanding How the SIG Works

The SIG is designed to read stand files from a given directory and automatically convert these files into a SVS data file. These SVS data files are then used to generate the bitmap images.

The SIG searches the data directory specified in the configuration file for two types of files:

1. Any file name starting with spot
2. Any file name starting with tsvs

For every file found, three files are created:

1. A conversion file - this file is used to instruct SVS on how to convert the file into a SVS data file
2. A SVS data file - this is the data file that SVS generates from the stand file
3. A bitmap image - this is the visual representation of the stand file that SVS generates

All three of these files are named according to the original file. For instance, if the original file was titled spot123 then the three files created would be:

spot123.convert - the conversion file

spot123.svs - the SVS data file

spot123.bmp - the bitmap image

There are four additional files generated by the SIG relating to the image files.

1. spot_image_list.lst - a list of all spot bitmap image files generated by SIG
2. tsvs_image_list.lst - a list of all tsvs bitmap image files generated by SIG
3. view_spot.bat - a batch file that opens the ViewPic application and plays a “movie” of the spot bitmap images
4. view_tsvs.spot - a batch file that opens the ViewPic application and plays a “movie” of the tsvs bitmap images

The image files are listed in alphabetical order so that the resulting movies shows the images in the proper order.

All of the files created by the SIG are placed into a project directory, which is specified at run time. This project directory is created as a sub directory of the data directory. The project directory allows users to keep the files generated by the SIG separate from the original data files and to easily access the resulting files at a later date.

Troubleshooting

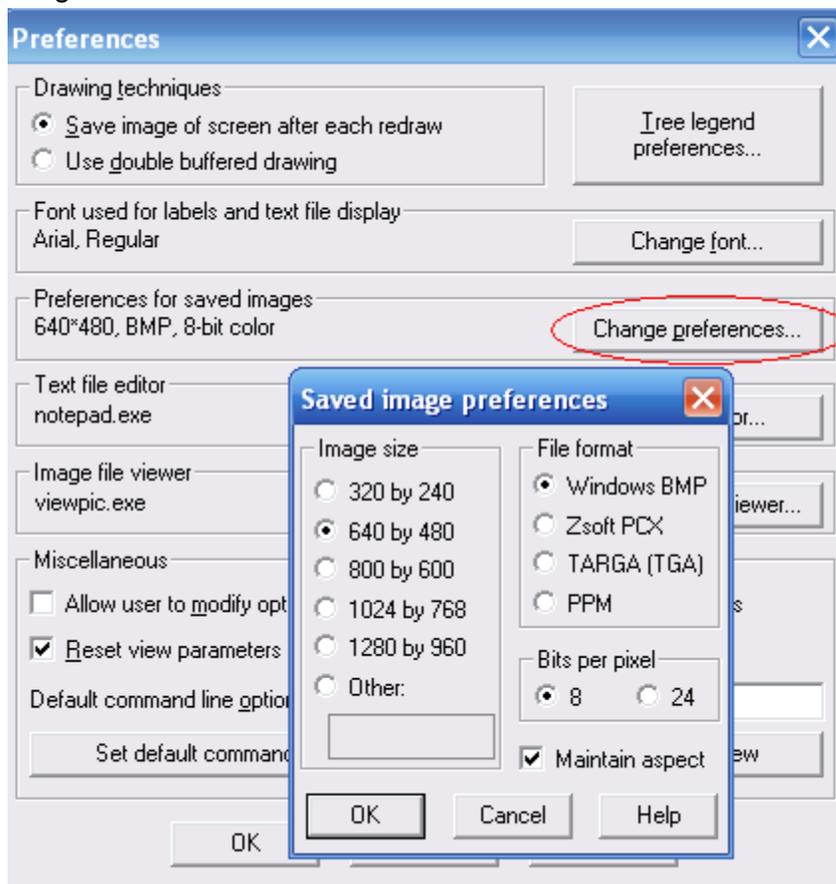
The “Movie” Displays the Images in the Wrong Order

The images are viewed in the order that they appear in the image list files (i.e. spot_image_list.lst). The image list files are generated as the SIG processes the data files, which is done in alphabetical order. When file names contain numbers, this alphabetical ordering can be confusing. For instance, consider the numbers: 8, 29, 174. Because 1 precedes 2, and 2 precedes 8 in our numbering system, the alphabetical ordering is 174, 29, 8. This problem can be avoided by rewriting the numbers so they all contain the same number of digits: 008, 029, 174.

The “Movie” Image Quality is Poor

If you find that the bitmap images being shown in the “movie” are blurred or fuzzy then you’ll need to change the image settings in SVS.

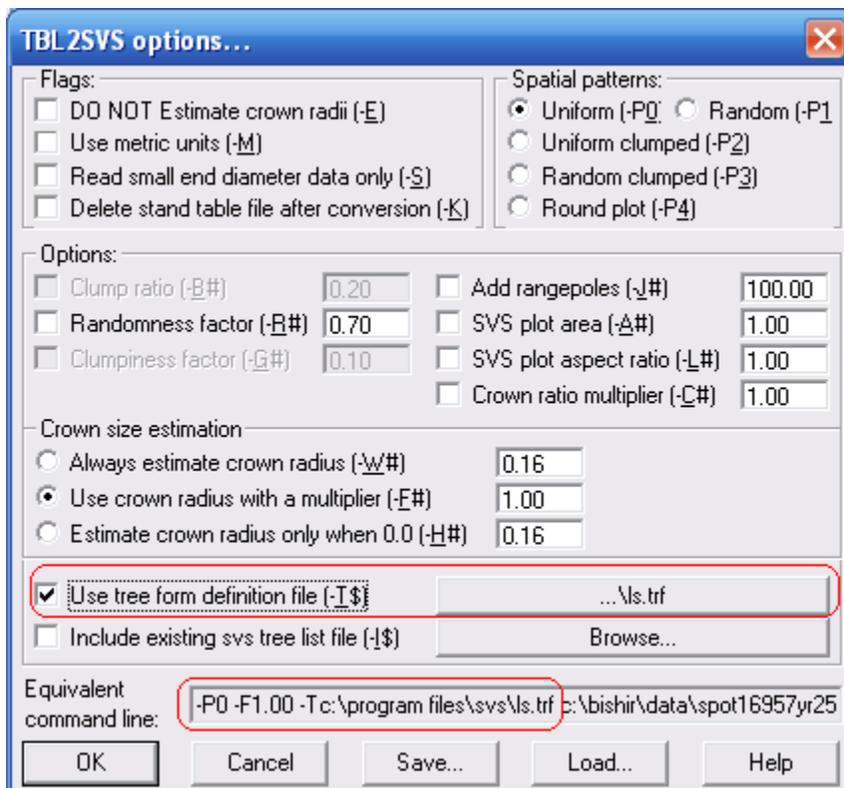
- **Open SVS**
 - **Open** Windows Explorer - hold down the Windows key + E on your keyboard
 - **Navigate** to the SVS directory
 - **Double Click** on the winsvs.exe file
- **Click File**
- **Choose Preferences**
- **Choose** Change Preferences under the “Preferences for Saved Images”
- **Adjust** the image properties accordingly
- **Click OK** - to save your image preferences
- **Click OK** - to close the preferences dialogue screen
- **Rerun** the SIG to generate new images



The Image Files Use the Wrong Tree Form Definition

When the SIG generates bitmap images it instructs SVS to use a specific tree form definition file. This setting is controlled in the SIG configuration file.

- **Open** SVS
- **Click** File
- **Choose** New Stand
- **Choose** Read an existing stand table data file
- **Point** SVS to a stand file
- **Click** Create SVS stand
- **Use** the file browser to select a new tree form definition file
- **Copy** the contents of the command line equivalent - only copy the up until the data file name (see image below)
- **Edit** the sig_configuration.bat file
- **Right** click on the sig_configuration.bat file
- **Choose** Edit
- **Change** the contents of the SVS_PARAMETERS by pasting the command line equivalent contents after the equal sign.
- **Save** and **Exit**
 - **Click** File
 - **Choose** Save
 - **Click** File
 - **Choose** Exit



Changing the Speed the Images Are Viewed in the Movies

The delay between images is controlled in the ViewPic application. If you want to either speed up or slow down the time between images during the movie playback you can edit the preferences in the ViewPic application. These preferences will affect all movies viewed from that point forward.

- **Open** the ViewPic application
 - **Open** Windows Explorer - hold down the Windows key + E on your keyboard
 - **Double** Click on the ViewPic.exe file
- **Click** File
- **Choose** Preferences
- **Adjust** the Delay between frames during animation setting
- **Click** OK
- **Click** File
- **Choose** Exit
- **Replay** your movie.

Modified Instructions for using the SIG on Windows 7 with folder Program Files(X86)^a

Create folder c:\treemovie

In c:\treemovie create subfolders data and script

In data copy the model output files that you want to make into a movie.

Install WINSVS

In c:\program files (X86) copy la.trf

Put the files sig.bat and sigconfig.bat into a folder of your choosing.

To change file settings you can edit sigconfig.bat or just double-click on sig.bat to run the generator.

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